2015

Short Food Supply Chains: Expectations and Reality

Richard Roberto Richards
University of Vermont, r.roberto.richards@gmail.com

SHORT FOOD SUPPLY CHAINS: EXPECTATIONS AND REALITY

A Thesis Presented

by

Richard R. Richards

to

The Faculty of the Graduate College

of

The University of Vermont

In Partial Fulfillment of the Requirements
for the Degree of Master of Science
Specializing in Food Systems

October, 2015

Defense Date: June 17, 2015
Thesis Examination Committee:

David S. Conner, Ph.D., Advisor
Jason S. Parker, Ph.D., Chairperson
Amy B. Trubek, Ph.D.
Cynthia J. Forehand, Ph.D., Dean of the Graduate College

ABSTRACT

Alternative food systems (AFSs) are so defined because they purport to challenge a value or ameliorate a negative impact of the dominant conventional food system (CFS). Short food supply chains (SFSCs) are a type of AFS whose alterity is defined by socially proximal economic exchanges that are embedded in and regulated by social relationships. This relational closeness is argued to have benefits with respect to economic, environmental, and social sustainability. However, it would be a mistake to assume that AFSs and CFSs are paradigmatically differentiated or that their structures engender particular outcomes.

The first article traces a misguided attempt to find indicators of success for farms participating in short food supply chains. The effort was misguided, because in designing the original study there was an assumption that producers participating in these AFSs shared similar goals, values, and definitions of success. The true diversity of these variables was discovered through the analysis of eighteen semi-structured interviews with Burlington and Montpelier area farmers who participate in SFSCs. This diversity motivated an exploration of the origins, common applications, and recent academic skepticism regarding assumptions of the relationship between certain food systems structures and broader food systems outcomes.

The second article undertakes to develop a framework for exploring the actual motivations of SFSCs farmers and challenging common AFS assumptions. A framework that differentiates motivations guided by formal and substantive rationality is used to code the aforementioned data. Common themes amongst the responses are discussed demonstrating that producer motivations for participating in AFSs can be diverse, contradictory, and subject to change.

CITATIONS

Material from this thesis has been submitted for publication to The Graduate Journal of Food Studies on March 31, 2015 in the following form:

Richards, Richard R. Alternative food systems: Expectations and reality. The Graduate Journal of Food Studies.

ACKNOWLEDGEMENTS

First and foremost, I would like to thank my advisor, Dr. David S. Conner, and committee members, Dr. Amy B. Trubek and Dr. Jason S. Parker, for their guidance, teaching, and support throughout this research and learning process. I was not always sure what I was doing or where I was going, but you saw me through to the end. Special thanks to my professors Dr. Shoshanah Inwood, Dr. Cheryl Morse, Dr. Teresa Mares, Dr. Paul Kindstedt, Dr. Jane Kolondinsky, and Dr. Eric Garza. The courses I have taken with you have been insightful and mind-expanding and all have played a role in my research. I would also like to thank Serena Parnau for her administrative support of the MS Food Systems program.

My gratitude goes out to all the farmers I interviewed over the course of this research for inviting me into their homes, sharing the stories of their lives and livelihoods, and putting up with a novice researcher and interviewer. Finally, many thanks to my fellow graduate students and friends—these years have been some of my best. Special thanks to Erin Golden for her expert editing and moral support at home.

TABLE OF CONTENTS

Page

CHAPTER 1: INTRODUCTION

The concept of the food system is both structural, existing as a network of visible actors who produce, process, distribute, sell, consume, and dispose of food, as well as an invisible cultural context that shapes and is concomitantly shaped by its structural elements. In recent decades discussions regarding the impacts of certain food systems structures and values have become louder and more widespread. This is in part because of increasing concern about the social, economic, and environmental sustainability of the values and practices embodied by the conventional food system (CFS).

From these concerns there have risen a set of values and practices termed the alternative food system (AFS). Participants in the AFS seek to challenge a value or ameliorate a negative impact they perceive to be associated with the CFS. These two systems are often framed in opposition to each other, and indeed as being somehow fundamentally different. There are many different kinds of AFSs, however they are conceptually united in that they attempt to resituate agricultural production and exchange within the context of a social relationship, and sometimes locate the site of production closer to the site of exchange. Both of these attributes, spatial and social proximity, are lost in the increasingly globalized and commoditized CFS. Recently, some have begun to question whether there is in fact a fundamental difference between the AFS and the CFS, and whether or not AFS necessarily generate the positive impacts they intend to.

This thesis traces a personal journey of scholarship from one end of this spectrum to the other, and then perhaps out to a less dogmatic vantage point. The thesis

consists of two articles, the first of which serves as both the literature review and a dismantling of my own, and perhaps relatively common assumptions about the attributes of AFSs.

When I set out to do the research for the first article, I had intended to discover indicators of success for farmers participating in short food supply chain, a type of AFS. I interviewed nineteen Vermont farmers who participated in short food supply chains (SFSCs). I collected a wide variety of information regarding the history and evolution of the farms and farmers, as well as farmer goals. I understand now the merits of a study intended to find indicators of farm success, and have an inkling of how it should be done. The way I did it however was not the way it should be done. Rather than find indicators of success I "found" that I had set out to do this study with the assumption that farmers participating in AFSs were relatively homogenous in their goals and motivations as a consequence of their participation in the AFS social movement. I was confronted with such a variety of goals, motivations, and practices that I was forced to acknowledge and discard my assumptions and seek a new framework through which to interpret farmers' actions.

This new framework is loosely based on two principles. First, one should not make the assumption that certain food systems structures necessarily produce certain food systems outcomes or necessitate adherence to certain value systems. Second, famers make decisions motivated both by the financial goals and requirements of their farm business, as well as personal non-economic goals and values. These two types of

rationalizations can both be at play, sometimes leading the farmer in complimentary or and at times contradictory directions.

The second article takes these principles and applies them to the data collected for the original research project in a bifurcated effort to describe the true nature of AFS farmer decision making, as well as find empirical evidence for the theoretical framework developed in the first article. A grounded theory method was used to examine and code the interviews done with farmers to identify common themes among the responses. These themes and their implications are discussed in detail in the article.

Chapter 2: Comprehensive Literature Review

There are numerous problems associated with agriculture and the food system today. Some of these impacts are tangible, including environmental damage, vanishing farmer livelihoods and rural communities, human health impacts, and social justice issues (Herren, 2011; Kirschenmann, Stevenson, Buttel, Lyson, & Duffy, 2000; Mares & Alkon, 2011; National Commission on Small Farms, 1998; Salamon, 1992; Tilman, Cassman, Matson, Naylor, & Polasky, 2002). Other impacts are more existential, including a sense of alienation from production, a lack of transparency and trust, and a yearning for more authentic foodways (Mount, 2011; Paxson, 2012; Turner & Hope, 2015) These impacts are perceived to arise from a set of values, practices, and characteristics that characterize the dominant paradigm of agricultural production and exchange here referred to as the conventional food system (CFS).

The Conventional Food System

The CFS is perceived to embody such processes and values as centralization, consumer dependence, competition, domination of nature, specialization, and exploitation (Bues & Dunlap, 1990; Kloppenburg et al., 2000). These values have shaped the structural characteristics of the CFS which include increasingly fewer and larger farms, vertical and horizontal integration of input manufacturers, producers, processors, distributors, and retailers in the food supply chain, increasingly globalized supply chains, and increased physical and social distance between producers and consumers (Hoppe, MacDonald, & Korb, 2010; Kirschenmann et al., 2000; Levins & Cochrane, 1996; Lyson, 2004; Turner & Hope, 2015). There has been a growing social movement that posits a

rejection across the board of values, practices, and characteristics of the CFS in order to resolve negative impacts that are perceived to be a consequence of these variables (Barham, 1997; Renting, Marsden, & Banks, 2003). The new values and structures that are emerging from this movement have been loosely labeled alternative food networks, here referred to as alternative food systems (AFS) (Marsden, Banks, & Bristow, 2000; Renting et al., 2003).

Origins of the Conventional and Alternative Food Systems

Since AFSs base their alterity in opposition to the CFS, the origins of AFSs and the CFS are intertwined. Elizabeth Barham (1997) applies the theories outlined in Karl Polanyi's 1944 book The Great Transformation to explain AFS origins and movements. Barham (1997) posits that the roots of AFS protest lie in the perceived negative impacts of the disembedding of economic activity that Karl Polyani theorized to have occurred during the Industrial Revolution. The concept of a disembedded economy derives from a substantivist rather than a formalist interpretation of economics, an opposition which Polanyi developed and has since been built upon and used by others (Barham, 1997; Cangiani, 2011). According to the formalist perspective human economic behavior is guided by formal rationality. In other words, individuals will try to maximize their gain in an economic transaction given conditions of scarcity (Cangiani, 2011). Classical economic theory posits that everything that is exchanged, including land and labor, should be bought and sold in competitive markets (Block, 1990). The items exchanged are commoditized, in that their value is reduced to an abstract notion of the degree to which they can satisfy a particular need. Because individuals are gain maximizing, they

will negotiate the most efficient level of production of a commodity through the price mechanism (Block, 1990). The system should regulate itself, changing the values and uses of commodities in response to shifts in societal demand and availability of a commodity. Political or societal notions of what is right are communicated through consumption preferences, rather than through political action or social pressure delivered through social relationships. The implicit consequence of this system is that commodities are stripped of any intrinsic value that is not relevant to the market (Barham, 1997).

In contrast to this traditional interpretation, Polanyi proposed a substantivist interpretation of economics. According to this substantivist interpretation the inherent rationality that is at the core of the formalist model and neoclassical economics, is not a universal human trait, but a product of a unique sociocultural institution called the market society (Cangiani, 2011). Prior to the existence of the market society, the substantivist interpretation posits that the economy simply described the ways and means by which people interacted with each other and their environment to meet their material needs (Cangiani, 2011). These interactions could involve, but did not necessarily involve gain maximizing behavior (Cangiani, 2011). Rather, economic transactions could be motivated, influenced, or regulated by religious, social, or political considerations (Cangiani, 2011). The great transformation to which Polanyi dedicates his book, is from a society whose economy is embedded in social institutions, to one in which the economy is disembedded, that is the economy is construed as an autonomous adjunct to society guided by its own internal logic of rational choice as is held by the formalist perspective (Cangiani, 2011). When the economy is thought of in this way, Polanyi argued, the

economy became autonomous, and thus gained a dominant position in organizing society (Cangiani, 2011).

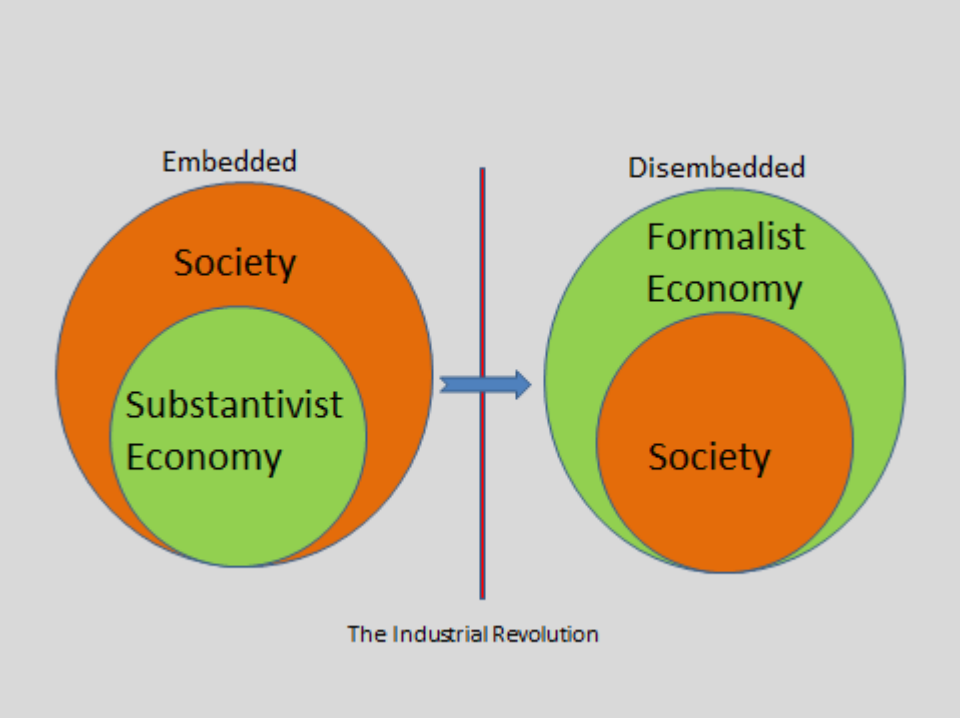

Figure 1. Theoretical foundations of alternative food systems. This figure is a graphical conceptualization of Karl Polanyi's theory of economic embeddedness, Barham (1997) argues that subsequent negative societal changes caused by the disembeddeding of the agricultural economy are at the root of AFS motivations.

Over the last two hundred years, agricultural production and exchange is argued by some to have been disembedded, its values and practices shaped according to the logic of formal rationality and unmediated by societal relationships and expectations (Barham, 1997; Lyson, 2004). This shift to formal rationality is at the core of CFS structure and a desire to re-embed food system activity motivates AFS activity (Barham, 1997). The consequences of pursuing formally rational agriculture have been discussed by many.

Impacts of the Conventional Food System

Concentration and Consolidation

CFS farmers often compete with each other in increasingly globalized spot markets where price is of paramount importance. In this highly competitive environment farmers who can reduce their costs of production through the adoption of new technologies, production strategies, or efficiencies of scale, initially enjoy larger profit margins than similar farmers (Levins & Cochrane, 1996). This incentive sparks a chain reaction identified by William Cochrane in 1958, which he dubbed "the treadmill" (Levins & Cochrane, 1996). As the market adjusts to a new equilibrium farmers who did not adopt cost cutting strategies may have production costs that are too high to operate profitably. Surviving farmers must progressively invest more capital in inputs that maximize production efficiency, while being simultaneously faced with lower marginal returns. The farms that most often fall by the wayside are small and medium-scale farms which are less likely to be able to make efficient use of investments in new technological advancements and reap sufficient incremental returns to sustain their business (Kirschenmann et al., 2000).

The Federal Government intervened in the commodity market several times through the use of subsidies to halt the downward trend of prices (Levins & Cochrane, 1996). As a result of these subsidies, there were no market consequences for the overproduction of commodity foods, thus farmers seeking to maximize profits saw an opportunity to do so by scaling up their operations and maximizing production (Levins

& Cochrane, 1996). Increased competition for land among farmers has driven land prices up, resulting in higher imputed land costs for farm operation (Levins & Cochrane, 1996). These higher imputed costs reduce the profitability of operations, and thus farmers must decide whether to invest in technologies that reduce production costs or to drop out of farming and profit from the value of their land (Levins & Cochrane, 1996). Higher land prices not only incentivize farmers to leave farming, but also make it difficult for new farmers to find affordable land (Levins & Cochrane, 1996; National Young Farmer's Coalition, 2011).

Many of the predicted effects of "the treadmill" on the structure of the farming sector have been borne out in the 2012 US census. National trends indicate that the total number of farms continues to fall, while the average size of farms and the proportion of farms grossing over $250,000 continues to rise (USDA National Agricultural Statistics Service, 2014). Meanwhile, the number of commercially viable small farms continues to fall (United States Department of Agriculture, 2010; USDA National Agricultural Statistics Service, 2014). However, in states where there is a strong interest in AFSs, such as Vermont, a reversal of these trends has begun to occur. Between 2007 and 2012 the state of Vermont gained over 350 farms, with a majority of this growth occurring in farms whose gross annual income was less than $50,000 (USDA National Agricultural Statistics Service, 2014).

Farming Communities

The impacts of disembedded farming practices on farming communities are well documented in numerous studies. In a given community it had been shown that quality of

life and community welfare indicators such civic engagement, economic activity, community appearance, and the quality of social services are dependent on the number of small locally owned businesses and farms that operate there (Goldschmidt, 1946; Lyson, Torres, & Welsh, 2001; Lyson, 2004; Mills & Ulmer, 1946). These variables are negatively impacted when farm size, absentee ownership, and waged labor, qualities associated with disembedded agricultural production, became more prevalent (Lyson et al., 2001; Lyson, 2004)

Sonya Salamon (1992) corroborates this pattern in a study of two culturally distinct Midwestern farming communities, whom Salamon calls the Yankees and the Yeoman. Farm management practices in Yankee communities are guided primarily by formal rationality, which is reflected in their preference for profit maximization. Management practices in Yeoman communities however seem to be guided more so by substantive rationality, in that Salamon(1992) observes cultural values to mediate market logic (Salamon, 1992). Yankee communities follow a familiar pattern of farm consolidation and subsequent deterioration of community life (Salamon, 1992). A rapid decline of farmer population, and the competition inherent in the mass production paradigm resulted in dramatic disparities in farmer wealth, ill will between farmers, depressed local economies, few businesses, and deteriorating infrastructure and institutions that would foster community interaction (Salamon, 1992). Yeoman communities on the other hand eschew maximizing farm management strategies in favor of perpetuating their social structure and cultural values (Salamon, 1992). Residents have a strong sense of community identity, they know of and about community members, and

interact with each other regularly. Yeoman towns are well-kept, and host locally owned businesses, and well attended churches and community events (Salamon, 1992). Perhaps more importantly these communities have stable populations of both elderly and young persons which allow for the maintenance of viable local institutions and services (Salamon, 1992). The importance of smaller, locally owned farms for community economic and social wellbeing has been noted by many others in academia and government (Kirschenmann et al., 2000; Lyson et al., 2001; Lyson, 2004; United States Department of Agriculture, 1998).

Alongside farms, food supply chains have also undergone dramatic changes. As profit oriented farmers reorganized their farms as highly specialized commodity factories, separate entities began assuming responsibility for pre-production and post-production activities. A small number of large companies are responsible for manufacturing and supplying the inputs of industrial commodity farming, as well as for the post-production processing, packing, distributing, storing, and marketing (United States Department of Agriculture, 1998). In return for these services, these middlemen take a portion of the profits that come from the eventual sale of these goods. Between 1910 and 1990, as these long food supply chains developed, the proportion of the agricultural economy received by farmers dropped from 21 percent to 5 percent (United States Department of Agriculture, 1998). These middlemen have become increasingly consolidated, stifling competition and setting low commodity prices for farmers (United States Department of Agriculture, 1998). In a 2011 study it was estimated that for every dollar that an end-consumer spent on food only 19 cents of that dollar are apportioned to the farmer

(Canning, 2011). The money that flows through these chains often leaves communities and ends up in the coffers of large multinational corporations rather than circulating in local economies (Lyson, 2004).

Environment

In an effort to lower the cost of agricultural production and maximize yields farmers around the world continually turn to new farm management strategies and production technologies. The impacts of these production strategies and technologies on the environment have been significant. Advances in plant breeding and now genetic modification have yielded highly productive grain crops whose productivity relies upon the use of chemical fertilizers, herbicides, pesticides, and more water and fossil fuels than alternative production strategies (Herren, 2011). Industrial agriculture, as this production strategy has come to be called, is linked to climate change, increased rates of deforestation, loss of biodiversity, decreased pollinator populations, increased soil degradation, chemical contamination, water body degradation, and water stress and desertification (Boucher et al., 2011; Herren, 2011; Magdoff & van Es, 2010; Tilman, Cassman, Matson, Naylor, & Polasky, 2002; University of Leeds, 2014; Wilson & Tisdell, 2001).

Health

The rationalizing of agronomic processes and political incentives have encouraged the production of foods that can be grown according to the mass production model, can be stored for a long time, and can be easily shipped long distances (Conner & Levine, 2006; Wallinga, 2010). With respect to plant products, cereals, grains, and

soybeans exhibit these desired traits. In 2012, the adult obesity rate in the United States was nearly 35 percent, and the childhood obesity rate was about 17 percent (Ogden, Carroll, Kit, & Flegal, 2014). These astronomical obesity rates have been linked to caloric surplus (Wallinga, 2010). The majority of these additional calories come from carbohydrates, sugars, and fats derived from commodity farm products, chiefly corn, wheat, and soybeans (Wallinga, 2010). The consumption of these commodity products may be displacing consumption of fruits and vegetables, as most Americas do not consume their daily recommended amounts (Evans et al., 2012). Eating less than the recommended daily servings of fruits and vegetables is a risk factor for cancer, obesity, and other chronic diseases (Evans et al., 2012). The social and economic costs of increased incidences of these diseases are significant. Obesity alone imposes indirect economic and social capital costs through reduced productivity and early mortality, and over $190 billion dollars in direct obesity-related healthcare costs every year (Lehnert, Sonntag, Konnopka, Riedel-Heller, & König, 2013).

The agricultural chemicals that are utilized to lower costs of production and maximize production further contribute to negative health outcomes. Long term studies of farm workers who work with certain pesticides, community members who live near application sites, and even consumers who eat treated foods suggest the potential for these chemicals to cause significant health impacts (Wilson & Tisdell, 2001).

The Promise of Alternative Food Systems

There has been increasing consumer and producer concern over the perceived impacts of the CFS discussed above (Renting et al., 2003; Selfa & Qazi, 2005; Stevenson

et al., 2011). A food product's perceived effects on such variables have been shown to influence interested consumers' perceptions of a product's quality and thus its desirability (Mount, 2011; Selfa & Qazi, 2005). Since the conventional supply chain intentionally strips products of this contextual information, there is an unserved market demand for products for which the production context is known. AFS arise out of this need, connecting consumers who are distrustful of or dissatisfied with the goods delivered by the CFS, with producers who can no longer or do not wish to participate in it (Renting et al., 2003). Producers and consumers agree to share information regarding the context or means of production to ensure that the product embodies the values desired by the consumer.

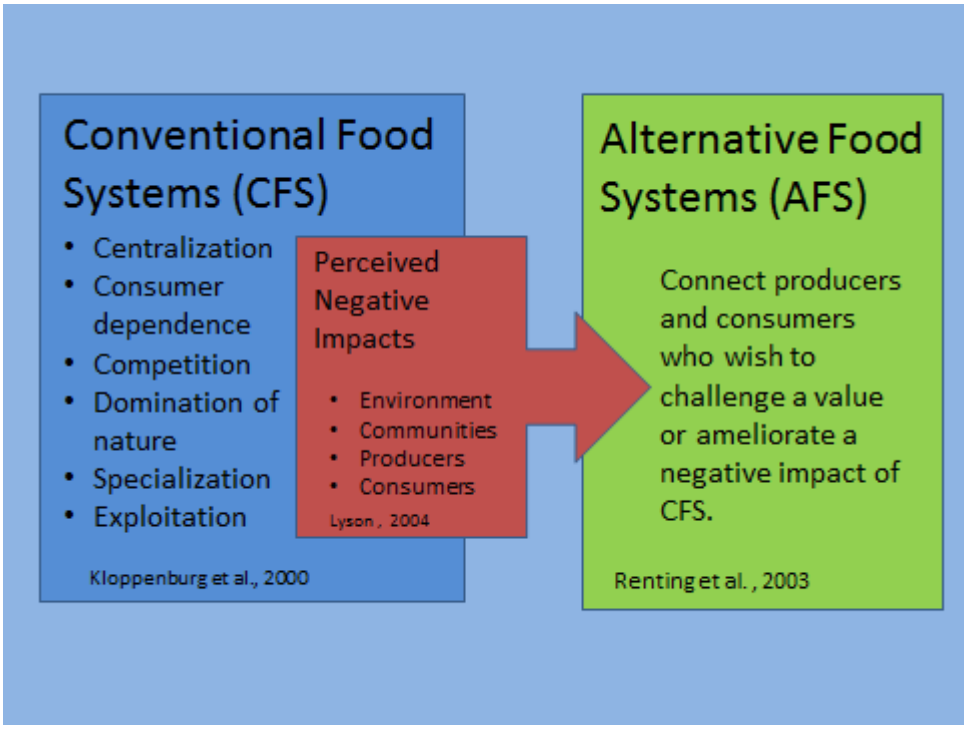

Figure 2. The CFS and AFS oppositional framework. AFS can be viewed as a social movement and anti-systemic protest against the disembedding of agricultural production and exchange.

Consumer dissatisfaction with the conventional commodity supply chain extends beyond a demand for more information regarding the context of production, some consumers are also distrustful of the products delivered by it (Mount, 2011; Renting et al., 2003). Mark Granovetter's (1985) work on the concept of economic embeddedness suggests that in part, this distrust arises from the perceived non-existence a social relationship between the consumer, and the much removed producer. In any economic exchange, there is the potential that one or more of the actors will behave in an opportunistic fashion, at the expense of the other party. In the conventional commodity supply chain, institutions and federal regulations are intended prevent this from happening (Mount, 2011). However, Granovetter (1985) argues that such safeguards only substitute for trust rather than generate it. More appealing than someone else's assurance that a producer is trustworthy, is a deep personal relationship with that producer (Granovetter, 1985). Because the conventional commodity supply chain produces decontextualized food products, and separates producers and consumers with numerous profit taking middlemen such as aggregators, processors, distributors, and retailers, such relationships are not possible. A common theme in AFS is an attempt to re-embed agricultural production and exchange in social relationships (Barham, 1997). One type of AFS that attempts to explicitly do this is the short food supply chain (SFSC).

In contrast to the foods delivered by the CFS, SFSC foods are intentionally embedded with social information such as how, where, and by whom a food product was produced (Marsden et al., 2000; Renting et al., 2003; Ross, 2007). When these goods are sold the act of exchange is perceived to be situated within a social relationship, rather

than completely alienated (Mount, 2011). SFSCs can end in three kinds of exchanges. First, there are those that terminate in face-to-face transactions between producers and consumers. Second, there are spatially proximal exchanges, which occur between local middleman and local consumers. Third, there are spatially extended transactions, which entail transactions for products that contain information about their context of production, however the transaction occurs between nonlocal middlemen and consumers (Marsden et al., 2000).

Table 1

Types of Short Food Supply Chain Market Venues

SFSC Market Type	Description	Examples Encountered
Face-to-Face	The consumer interacts directly with the producer or processor. Authenticity, trust, and social/geographical context of production is generated through personal interaction.	Community Supported Agriculture (CSA), Farmers Markets, Farm Stands, Pick-Your-Own, Online Ordering
Spatially Proximal	Products are produced and retailed within a specific region, but the retail sale is conducted by a party other than the producer. Product is still delivered with socially contextualizing information, and consumers are made aware of its local nature.	Local Coop Grocery Stores, Grocery Stores, Food Hubs, Other Farms' Sales Venues, Institutions (Schools, Hospitals, Retirement Homes), Restaurants
Spatially Extended	Products are retailed out outside of the region of production, and consumers may have no personal connection to the region. However, products are still	Regional Distributors, Out of Region Delivery CSA.

	differentiated by the inclusion of socially and geographically contextualizing information

Note. The table shows the three types of short food supply chain markets adapted from (Marsden, Banks, & Bristow, 2000).

The first two kinds of exchanges create the most opportunity for economic exchanges to be experienced as situated in a social relationship and are understood to have the shortest relational distance (Ross, 2007). Thus, the SFSC structurally differentiates itself from the CFS through the elimination, reduction, or social contextualization of middlemen in the food supply chain, provisioning food products that also deliver social relationships and trust. The relational closeness that defines SFSCs confers upon consumers a direct role in what producers provision and how, a power that is confirmed by SFSC producers (Ross, 2007). Relational closeness allows consumers to directly communicate the values they want embodied in their foods, and also confirm through questioning and observation that these values are present (Mount, 2011). This degree of perceived control and transparency is impossible in the CFS due to the lack of contextual information delivered with a commodity product and the relational distance between producers and consumers.

Provisioning contextual information to consumers who are willing to pay for it gives farmers a way to profit from values that are not rewarded in commodity markets (Turner & Hope, 2015). Other potential benefits of SFSCs include community economic development. These benefits are achieved by keeping economic exchanges local, cutting profit taking middlemen out of the supply chain, and even generating additional economic activity, an effect called an economic multiplier (Canning, 2011; Martinez et

al., 2010). Perhaps more controversially, it has been argued that communities with more spatially and socially proximal businesses score higher on quality of life indicators, and experience higher rates of civic engagement (Goldschmidt, 1946; Lyson, 2004; Mills & Ulmer, 1946).

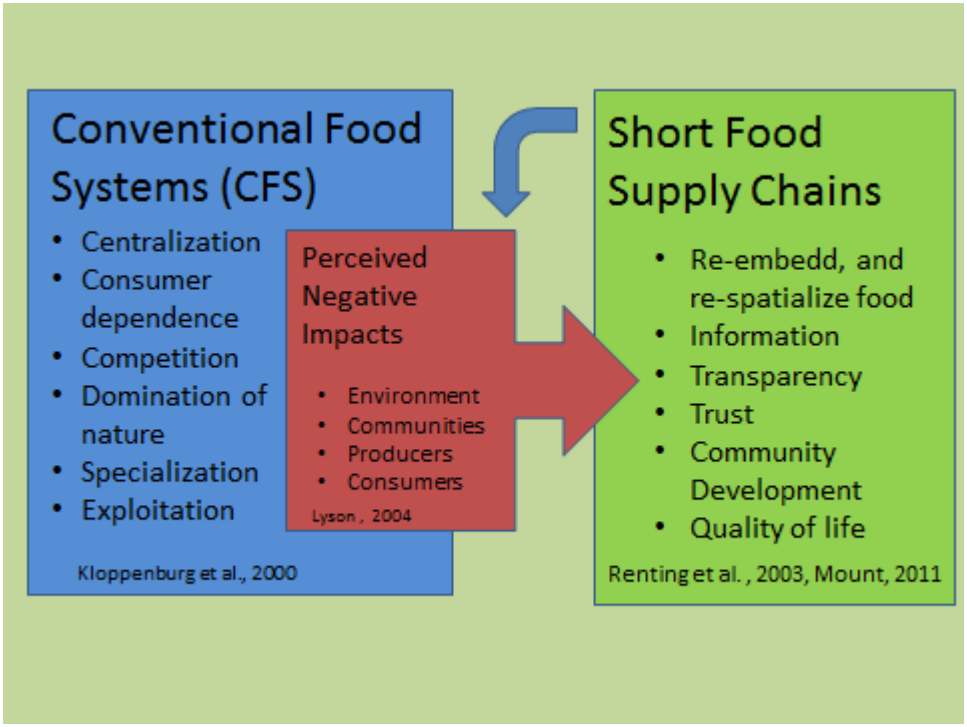

Figure 3. Short food supply chain objectives and impacts.

The Debate Over AFSs

The structure of AFS exchange seems to allow for greater transparency, consumer and producer agency, consumer producer relationships, market valuation of public goods, local economic activity, and more. However, there is evidence of an academic and political overemphasis on structural approaches to respatialize and resocialize food production in efforts to achieve desirable food systems improvements (Inwood, Clark, & Bean, 2013). In fact, there have been a rising tide of studies that caution against making

assumptions that certain values, practices, or impacts are a necessary outcome of AFS structures like SFSCs. It has been demonstrated that consumers make many assumptions about a product's context of production, and producer adherence to the consumer's value system simply as a result of the product being spatially proximal (Turner & Hope, 2015). Consumers have been shown to believe that local food is fresher, of higher quality, more natural, and less environmentally impactful than food purchased through spatially extended conventional supply chains (Turner & Hope, 2015). These assumptions have been shown to not necessarily be true (Turner & Hope, 2015). These studies begin to suggest that consumers conflate the structure of an exchange with adherence to certain values, or with certain outcomes or impacts, though they do not take the initiative, or may not have a way to test those assumptions.

Similarly, consumers may be susceptible to making assumptions with respect to social proximity. Short food supply chains are supposed to enable consumers to interrogate producers about the methods used in the production of and values embodied in their food purchases. However, some research suggests that consumers in SFSCs are liable to be predisposed to trust producers in direct exchanges, rather than generate trust through relationship building (Mount, 2011). Thus, is seems that even trust, which is supposed to be an outcome of a process, is perceived to be an inherent quality of the type of exchange. In addition, despite placing an emphasis on social proximity, SFSCs have at times been shown to be neglectful of the broader social good, perpetuating white privilege, unequitable distribution, and other harmful social dynamics (Turner & Hope, 2015).

Some argue that assumptions that certain values and outcomes are an inherent quality of AFSs arise from their inappropriate framing as being opposed to, superior, and fundamentally different than the CFS (McClintock, 2014). This dichotomous oppositional framing appears to be at the core of AFS authenticity as discussed through the work of Polanyi and Barham (1997) above. Fundamentally, the assumption of opposing values, practices, and structures rests upon Karl Polanyi's opposing forms of formal and substantive rationality. An authentic AFS producer is expected to value independence, community, harmony with nature, diversity, and restraint (Bues and Dunlap's (1990) qualities of a sustainable, alternative food system) rather than gain-maximizing, self- interested behaviors such as centralization, dependence, competition, domination of nature, specialization, and exploitation associated with the CFS. However, it is not an inherent quality of the AFS structures such as SFSCs that this dichotomy should be enacted. There is nothing stopping an SFSC farmer from being competitive, from neglecting the health of his soil, selling only to the affluent, or anything else for that matter.

Not only is there evidence that the AFS, and SFSC do not necessitate adherence to a fundamentally different value system, there are questions about whether there is anything except a superficial difference between AFSs and CFSs. One argument to the contrary is that AFSs are aligned with the same formalist neoliberal paradigm that underlies the CFS that they purport to challenge (Mares & Alkon, 2011; McClintock, 2014). As a result, AFSs are argued to perpetuate many of the same social inequalities imposed by the CFS and distract motivated individuals from pursuing more radical

change (Mares & Alkon, 2011). Additionally, there is evidence that even in AFS markets, participants make many of the same formal rationalizations that take place in spatially and socially extended CFS transactions (Block, 1990; Hinrichs, 2000). Though it is likely that social and spatial proximity can play a role in mediating market logic in AFS exchanges, it seems that is not a given quality of that exchange. A similar line of reasoning is pursued by Born and Purcell, who caution against any assumption of a causal relationship between the scale of food system structures and any kind of function or benefit (2006). Yet still, there are those who argue that benefits can be had (Lyson, 2004; Ross, 2007). In truth, it is likely that reality is more nuanced than either a binary opposition or a complete lack of difference between CFSs and AFSs (McClintock, 2014). This conclusion is supported by an ongoing critical examination of Karl Polanyi's original framing of embedded and disembedded economies and their association with substantive and formal rationality.

Granovetter (1985) called into question the dichotomous framing of disembedded and embedded economies posited by Polanyi. Granovetter (1985) argued that modern economic activity never wholly disembedded, and that preindustrial economies were never wholly embedded either. He supported his argument be examining ways in which social relationships inform and constrain the supposedly independent logic of the free market in modern societies. One example he highlights is how a stock trader, who presumably is solely motivated by the logic of the market, might make a less rational deal with a trader with whom s/he is a friend (Granovetter, 1985).

Fred Block (1990) further refines the argument of the always embedded economy by positing that the consideration of embeddedness, the importance of social relations and expectations, is in tension with considerations of marketness, the importance of price, and instrumentalism, the importance of individual substantive goals, in every economic transaction (Block, 1990). Depending on the unique characteristics of the actors and context of the transaction, the degree to which embeddedness, marketness, and instrumentalism play a role in a transaction varies. While embeddedness is opposed to marketness and instrumentalism, it does not preclude them, and all could play a role in a given economic transaction (Block, 1990). Thus, Granovetter (1985) and Block (1990) completely do away with the notion of a society shaped and constrained by an independent market logic or completely constrained by the expectations of society. Instead, economic decisions are always embedded in society and individuals are independently acting upon prioritization of marketness, instrumentalism, and embeddedness in every economic exchange. Marketness and instrumentalism, both involving the pursuit of individual gain are informed by formal rationality, while embeddedness prioritizes social and moral obligations is informed by substantive rationality.

Clare Hinrichs (2000) brings Block's interpretation of economic exchange to bear on AFSs, using it to dismantle their posited alterity based on embeddedness. If embeddedness can be found to influence the workings of the supposedly formally rational CFS, Hinrichs (2000) asks, could marketness and instrumentalism, motivated by formal rationality, be found in the supposedly hyper-embedded exchanges of the AFS? By

observing economic exchanges at farmer's markets and CSAs, two of the most relationally proximal types of AFS exchanges, Hinrichs (2000) determines that instrumentalism and marketness are present. Thus, "embeddedness should not be seen as the friendly antithesis of the market (Hinrichs, 2000, p. 296)." This evolving dialogue provides evidence and a framework for explaining how formal rationality and substantive rationality can simultaneously motivate decision making on the SFSC farm level.

Research Gap

The debate regarding the legitimacy of the theoretical underpinnings of AFS, and whether or not they live up expectations continues to evolve (McClintock, 2014; Turner & Hope, 2015). At the same time, there are others who take a more practical approach. Rather than debate the legitimacy of the AFS concept, David Conner and Ralph Levine (2006) use a systems based approach to show how a community based food system can generate positive outcomes and suggest places to intervene in the food system to spur wider and persistent change. Conner and Levine (2006) recommend such diverse interventions as increasing local food accessibility, creating the regulatory, educational, and economic infrastructure to support community food systems, and nutrition and food system education for children and consumers to change consumer values. A significant element of such research is that AFS structures are not viewed as an end in and of themselves, rather methods for achieving specific outcomes and impact are recommended.

In Vermont, many of the interventions and supports discussed by Conner and Levine (2006) are already being implemented , with the state, academia, and institutions

working together to increase healthy food consumption and develop agriculturally based economic activity (Vermont Sustainable Jobs Fund, 2013). While interest in SFSCs is growing around the country, few states have been as committed to supporting and expanding them as Vermont. As such, Vermont is a fertile ground for examining how SFSC producers negotiate tensions between formal and substantive rationality in a supportive, yet increasingly economically competitive environment. In fact, there is at present a lack of in-depth qualitative studies that examine the values, motivations, and practices of farmers participating in AFSs (Turner & Hope, 2015).

Rather than rely on debunked assumptions regarding motivations of SFSC farmers, this thesis will continue the work of Granovetter (1986), Block (1990), and Hinrichs (2000) by applying their interpretive framework of substantive and formal rationality concomitantly informing SFSC farmer decision making. In doing so, this thesis seeks to contribute to both the theoretical and practical literature on AFSs and SFSCs described above. It seeks to confirm or challenge assumption about AFS alterity, as well as provide practical results regarding AFS farmer motivations, which can be used guide practically minded systems based interventions.

Research Questions

This research is guided by the following research questions. First, since assumptions regarding SFSC farmer motivations seem to be perniciously strong and information actual farmer motivations seems to be scant, the thesis will answer what SFSC farmer motivations for participating in face-to-face, spatially proximal, and spatially extended SFSC markets actually are.

Second, by examining farmer motivations through the above framework this thesis seeks to either confirm or deny a concomitant role of formal and substantive rationality in SFSC farmer decision making. Answering this question will either challenge or corroborate the work of Granovetter (1985), Block (1990), and Hinrichs (2000) and if confirmed opens a path to a whole new line of more productive academic inquiry. If farmer decision making is not constrained or defined by participation in the supposedly hyper-embedded, substantively motivated SFSC, then debates over the efficacy of SFSCs in addressing certain food systems outcomes are not very useful since the supply chains themselves do not constrain behavior. What is important then are questions about how to best achieve certain outcomes, like those pursued by Conner and Levine (2006). Implicitly, this question also challenges the utility of authenticity as way of defining a legitimate SFSC producer. Is a substantively motivated farm the best way of achieving beneficial food systems impacts, or is that definition of authenticity just getting in the way of more effective change?

This literature review synthesizes a long arc of theory regarding AFSs and SFSC, and though it ends with these research questions, it is not with these questions that this research began. This research was inductive and iterative. Initially, I conducted interviews without a clear idea of what questions I was trying to answer. I collected descriptive data about SFSC farms and farmers, which I believed were the key to improving food system sustainability. What emerged from these interviews was an apparent a tension between my expectations regarding SFSC farmer values and motivations, which had been shaped by body of literature that that did the same, and the

more complex reality that I encountered. I then returned to the literature, with the intention of examining this tension and encountered the work of Grannovetter (1985), Block (1990), and Hinrichs (2000) who had identified similar incongruities. The process of developing the theoretical framework described above and outlining its supporting literature is the main purpose of a Chapter Three of this thesis, written as an auto-ethnographic account of that process of discovery. Much of Chapter Three is reproduced in this literature review as it is the product of that process. The second article applies this framework in an attempt to thoroughly answer the research questions posed in in this literature review.

CHAPTER 3: ALTERNATIVE FOOD SYSTEMS: EXPECTATIONS AND REALITY

Ever since I spent two seasons living and working on a small scale organic vegetable farm in rural Virginia, the seed of this paper was sown in my mind. I perceived many positive impacts of farming food organically and selling it locally. I was helping to increase biodiversity, foster community, build soils, and grow healthy and fabulous food. It was rewarding work, but I was constantly confronted with a stark reality; it was a hard way to make a living. It was not just the farm on which I worked. Most farmers I met relied on some sort of special circumstance, be it an additional job, a benevolent land arrangement, financial resources, or cheap labor to keep their farms in operation. I wondered how small, locally oriented farms could be so beneficial, necessary, and ostensibly popular and yet be so marginally successful financially. It did not seem to be a matter of working harder or even working smarter. The cards just seemed stacked against us. On several occasions I was asked by a prospective customer, "Why is all the food here more expensive than at the store?" I would hedge for a bit and then turn to my manager expectantly. It was clear that she did not know the answer either. Invariably, the customer wandered off, presumably to a grocery store where the prices were lower.

I began to develop an "us" versus "them" mentality. "We" were small scale farms that sold food directly to customers. Our commitment to organic agriculture and conservation enhanced environmental quality and yielded safer and higher quality products. Our sales methods fostered community among and with our customers. This spirit of interconnectedness even extended to our competitors. We would visit nearby

farms on a monthly basis to share food, strategies, and advice. From a strict business perspective, our methods did not make much sense. We took on a lot of costs in order to do what we thought was right, and we collaborated with our market competitors in pursuit of this higher goal. It was clear that we were all committed to provisioning food in a way that meant something more than a paycheck. "They," on the other hand, were big nameless farms that sold their food in grocery stores. They degraded the environment, substituting human artifice for natural systems in pursuit of efficiency, quantity, profits, and an ever larger market share. I assumed we were somehow two fundamentally different systems for provisioning food, operating according to different principles but competing for the same consumers. I wanted to learn how these systems were different so that I could help beneficial systems grow. It was with this mindset that I entered the Masters of Science Food Systems program at the University of Vermont.

It turned out that my assumption that two opposing production and distribution paradigms were wrestling over the shape of the food system was not uncommon. Not only was this assumption shared by my peers, I found support for it in literature as well. A superficial assessment of this conflict posits that there is a dominant paradigm of food production, distribution, and consumption which I will refer to as the Conventional Food System (CFS). The CFS embodies such processes and values as centralization, consumer dependence, competition, domination of nature, specialization, and exploitation.[1] This food system is perceived by some to have negative consequences for the environment, communities, producers, and consumers.[2] Both producers and consumers who feel disadvantaged, unserved, threatened, or ethically unaligned with the conventional food

system have formed Alternative Food Systems (AFS).[3] In this sense, some have posited that the development of AFSs represents a kind of antisystemic protest against tangible and existential negative impacts of the CFS.[4] AFSs connect producers and consumers who engage in economic exchanges that are in part intended to challenge a value or ameliorate a negative impact of the CFS.[5] AFSs have become incredibly diverse in terms of which values and impacts of the CFS they focus on as a point of differentiation. The Fair Trade and organic movements, community supported agriculture (CSA), farmers markets, localism, and more can all ultimately be characterized as rejections of a value or impacts of the CFS.[6] However, it would be a mistake to assume that AFS and CFS are paradigmatically differentiated, and thus their potential to bring about fundamental food systems change is not an inherent quality of their expansion. To better understand this distinction it is necessary to explore the history of the emergence of the CFS and AFS and the evolution of theory regarding them.

A Disembedded Economy

Elizabeth Barham applies the theories outlined in Karl Polanyi's 1944 book *The Great Transformation* to explain AFS origins and movements. Barham posits that the roots of AFS protest lie in the perceived negative impacts of the disembedding of economic activity that Karl Polyani theorized to have occurred during the Industrial Revolution.[7] The concept of a disembedded economy derives from a substantivist rather than a formalist interpretation of economics, an opposition which Polanyi developed and has since been built upon and used by others.[8] According to the formalist perspective, human economic behavior is guided by formal rationality. In other words, individuals

will try to maximize their gain in an economic transaction given conditions of scarcity.[9] The decades following the Industrial Revolution were characterized as a time when this universal form of rationality became systematized through the development of classical economic theory.[10] Classical economic theory posits that everything that is exchanged, including land and labor, should be bought and sold in competitive markets.[11] The items exchanged are commoditized in that their value is reduced to an abstract notion of the degree to which they can satisfy a particular need. Because individuals are gain maximizing, they will negotiate the most efficient level of production of a commodity through the price mechanism.[12] The system should regulate itself, changing the values and uses of commodities in response to shifts in societal demand and availability of a commodity. Political or societal notions of what is right are communicated through consumption preferences, rather than through political action or social pressure delivered through social relationships. The implicit consequence of this system is that commodities are stripped of any intrinsic value that is not relevant to the market.[13]

In contrast to this traditional interpretation, Polanyi proposed a substantivist interpretation of economics. According to this substantivist interpretation, the inherent rationality that is at the core of the formalist model and neoclassical economics is not a universal human trait but rather a product of a unique sociocultural institution called the market society.[14] Prior to the existence of the market society, the substantivist interpretation posits that the economy simply described the ways and means by which people interacted with each other and their environment to meet their material needs.[15] These interactions could involve but did not necessarily involve gain maximizing

behavior.[16] Rather, economic transactions could be motivated, influenced, or regulated by religious, social, or political considerations.[17] The great transformation, to which Polanyi dedicates his book, is from a society whose economy is embedded in social institutions to one in which the economy is disembedded. In other words, the economy is construed as an autonomous adjunct to society guided by its own internal logic of rational choice.[18] When the economy is thought of in this way, Polanyi argued, the economy became autonomous and thus gained a dominant position in organizing society.[19] The perceived consequences of this transformation are manifold and have been expounded upon by many. Here I will trace the perceived impacts of the adoption of the formalist economic paradigm on the food system.

A Disembedded Agriculture

About two hundred years ago, farms were still the economic and cultural anchors of rural community life in America.[20] The household was the primary productive unit, producing much of what it needed itself, but it also engaged in exchanges of labor and goods with other households.[21] Farm products were not necessarily produced for exchange and profit but rather were produced for the survival of the farm and the community upon which everyone relied.[22] Persistent face to face interactions between exchange partners bonded together by common livelihoods resulted in economic exchanges that were deeply embedded in and influenced by social relationships.[23] These social relationships, enforced by their condition of mutual interdependence, served as a mechanism to regulate economic behaviors that could harm the community.[24] Such regulation could include negative social feedback or a refusal to participate in further

economic exchanges.[25] According to Polanyi's dichotomous framework, this organization of economic activity appears to be socially embedded. Contemporaneously, however, the American manufacturing sector and much of Western Europe was rapidly reorganizing around a disembedded economy.

During the Industrial Revolution the manufacturing center shifted from artisanal production to a system of mass production which relied upon the specialization of labor, the replacement of human labor with machine labor, and the standardization of production processes and products.[26] These changes were motivated by the logic of formal rationality to maximize individual gain and to reduce the chances of being outcompeted and forced into poverty.[27] According to Polanyi, gain and profit became "the organizing force of society," and the role of social institutions in the regulation of economic activity evaporated.[28] However, these changes were slower to transform the American farming sector.[29]

In the nineteenth century, farm production rates remained low, motivating the federal government to pass the Morrill Act of 1862. The Morrill Act established land grant universities whose purpose was to bring rationality and standardization, core values of mass production, to agriculture.[30] This and subsequent acts created a research and education system funded by US tax payers aimed at industrializing the agricultural process. Machines, chemicals, breeding programs, and farming schemes that sought to maximize the production efficiency of farms flowed from these universities and extension agencies. However, even with the economic playing field set and the equipment and rules being devised for them to play on it, farmers still resisted adopting

the mass production paradigm. A significant factor in this reluctance was that the social relationships between the farmer and the community were taking precedence over the rational drive for maximal efficiency and profits.[31] Upon discovering this, the federal government created outreach and education programs to teach farmers to manage their farm capital for profit maximization independent of their community context.[32]

Consequences of Disembedding

Many of the negative impacts of disembedding the agricultural economy are a consequence of farm production practices and economic relationships becoming organized around the logic of formal rationality. The dichotomous framing of the CFS and AFS conflict posits CFSs as the embodiment of disembedded agricultural production, and AFS attempt to address the consequences of disembedded production, sometimes by attempting to socially re-embed production.[33]

Concentration and Consolidation

CFS farmers often compete with each other in increasingly globalized spot markets where price is of paramount importance. In this highly competitive environment, farmers who can reduce their costs of production through the adoption of new technologies, production strategies, or efficiencies of scale initially enjoy larger profit margins than similar farmers.[34] This incentive sparks a chain reaction identified by William Cochrane in 1958, which he dubbed "the treadmill."[35] As the market adjusts to a new equilibrium, farmers who did not adopt cost cutting strategies may have production costs that are too high to operate profitably. Surviving farmers must progressively invest more capital in inputs that maximize production efficiency, while simultaneously being

faced with lower marginal returns. The farms that most often fall by the wayside are small and medium-scale farms which are less likely to be able to make efficient use of investments in new technological advancements and reap sufficient incremental returns to sustain their businesses.[36]

The US federal government intervened in the commodity market several times through the use of subsidies to halt the downward trend of prices.[37] As a result of these subsidies, there were no market consequences for the overproduction of commodity foods; thus, farmers seeking to maximize profits saw an opportunity to do so by scaling up their operations and maximizing production.[38] Increased competition for land among farmers has driven land prices up, resulting in higher imputed land costs for farm operation.[39] These higher imputed costs reduce the profitability of operations, and therefore farmers must decide whether to invest in technologies that reduce production costs or to drop out of farming and profit from the value of their land.[40] Higher land prices not only incentivize farmers to leave farming but also make it difficult for new farmers to find affordable land.[41]

Many of the predicted effects of the treadmill on the structure of the farming sector have been borne out in the 2012 US census. National trends indicate that the total number of farms continues to fall, while the average size of farms and the proportion of farms grossing over two hundred and fifty thousand dollars continue to rise.[42] Meanwhile, the number of commercially viable small farms continues to fall.[43] However, in states where there is a strong interest in AFSs, such as Vermont, a reversal of these trends has begun to occur. Between 2007 and 2012, the state of Vermont gained over

three hundred and fifty farms, with a majority of this growth occurring in farms whose gross annual income was less than fifty thousand dollars.[44]

Farming Communities

The impacts of disembedded farming practices on farming communities are well documented in numerous studies. In a given community it has been shown that quality of life and community welfare indicators such civic engagement, economic activity, community appearance, and the quality of social services are dependent on the number of small locally owned businesses and farms that operate there.[45] These variables are negatively impacted when farm size, absentee ownership, and waged labor--qualities associated with disembedded agricultural production--became more prevalent.[46]

Sonya Salamon corroborates this pattern in a study of two culturally distinct Midwestern farming communities, whom Salamon calls the Yankees and the Germans.[47] Farm management practices in Yankee communities are guided primarily by formal rationality, which is reflected in their preference for profit maximization. Management practices in German communities, however, seem to be guided more so by substantive rationality;[48] Salamon observes cultural values mediating market logic in German communities whereas Yankee communities follow a familiar pattern of farm consolidation and subsequent deterioration of community life.[49] A rapid decline of farmer population and the competition inherent in the mass production paradigm resulted in dramatic disparities in farmer wealth, ill will between farmers, depressed local economies, few businesses, and deteriorating infrastructure and institutions that could foster interaction in Yankee communities.[50] German communities, on the other hand,

eschew maximizing farm management strategies in favor of perpetuating their social structure and cultural values.[51] Residents have a strong sense of community identity, they know of and about community members, and they interact with each other regularly. German towns are well kept and host locally owned businesses and well attended churches and community events.[52] Perhaps more importantly, these communities have stable populations of both elderly and young persons which allow for the maintenance of viable local institutions and services.[53] The importance of smaller, locally owned farms for community economic and social wellbeing has been noted by many others in academia and government.[54]

Alongside farms, food supply chains have also undergone dramatic changes. As profit oriented farmers reorganized their farms as highly specialized commodity factories, separate entities began assuming responsibility for preproduction and postproduction activities. A small number of large companies are responsible for manufacturing and supplying the inputs of industrial commodity farming, as well as for the postproduction processing, packing, distributing, storing, and marketing.[55] In return for these services, these middlemen take a portion of the profits that come from the eventual sale of these goods. Between 1910 and 1990, as these long food supply chains developed, the proportion of the agricultural economy received by farmers dropped from twenty-one percent to five percent.[56] These middlemen have become increasingly consolidated, stifling competition and setting low commodity prices for farmers.[57] A 2011 study estimates that for every dollar that an end consumer spent on food, only nineteen cents of that dollar are apportioned to the farmer.[58] The money that flows through these long food

supply chains often leaves communities and ends up in the coffers of large multinational corporations rather than circulating in local economies.[59]

Environment

In an effort to lower the cost of agricultural production and maximize yields, farmers around the world continually turn to new farm management strategies and production technologies. The impacts of these production strategies and technologies on the environment have been significant. Advances in plant breeding and now genetic modification have yielded highly productive grain crops dependent upon the use of chemical fertilizers, herbicides, pesticides, and more water and fossil fuels than alternative production strategies.[60] Industrial agriculture, as this production strategy has come to be called, is linked to climate change, increased rates of deforestation, loss of biodiversity, decreased pollinator populations, increased soil degradation, chemical contamination, water body degradation, and water stress and desertification.[61]

Health

The rationalizing of agronomic processes and political incentives have encouraged the production of foods that can be grown according to the mass production model, stored for a long time, and easily shipped long distances.[62] With respect to plant products, cereals, grains, and soybeans exhibit these desired traits. In 2012, the adult obesity rate in the US was nearly thirty-five percent, and the childhood obesity rate was about seventeen percent.[63] These astronomical obesity rates have been linked to caloric surplus.[64] The majority of these additional calories come from carbohydrates, sugars, and fats derived from commodity farm products--chiefly corn, wheat, and soybeans.[65] The

consumption of these commodity products may be displacing consumption of fruits and vegetables since most Americas do not consume their daily recommended amounts.[66] Eating less than the recommended daily servings of fruits and vegetables is a risk factor for cancer, obesity, and other chronic diseases.[67] The social and economic costs of increased incidences of these diseases are significant. Obesity alone imposes indirect economic and social capital costs through reduced productivity and early mortality, and over one hundred and ninety billion dollars in direct obesity related healthcare costs every year.[68]

The agricultural chemicals that are utilized to lower costs of production and maximize production further contribute to negative health outcomes. Long term studies of farm workers who work with certain pesticides, community members who live near application sites, and even consumers who eat treated foods suggest the potential for these chemicals to cause significant health impacts.[69]

Alternative Food Systems

There has been increasing consumer and producer concern over the perceived impacts of the CFS discussed above.[70] A food product's perceived effects on such variables have been shown to influence interested consumers' perceptions of a product's quality and thus its desirability.[71] Since the conventional supply chain intentionally strips products of this contextual information, there is an unserved market demand for products for which the production context is known. AFSs arise out of this need, connecting consumers who are distrustful of or dissatisfied with the goods delivered by the CFS with producers who can no longer or do not wish to participate in it.[72] Producers and

consumers agree to share information regarding the context or means of production to ensure that the product embodies the values desired by the consumer.

Consumer dissatisfaction with the CFS extends beyond a demand for more information regarding the context of production; some consumers are also distrustful of the products delivered by it.[73] Mark Granovetter's work on the concept of economic embeddedness suggests that, in part, this distrust arises from the perceived nonexistence of a social relationship between the consumer and the much removed producer.[74] In any economic exchange, there is the potential that one or more of the actors will behave in an opportunistic fashion at the expense of the other party. In the CFS, institutions and federal regulations are intended to prevent this from happening.[75] However, Granovetter argues that such safeguards only substitute for trust rather than generate it.[76] More appealing than someone else's assurance that a producer is trustworthy is a deep personal relationship with that producer.[77] Because the CFS produces decontextualized food products and separates producers and consumers with numerous profit taking middlemen such as aggregators, processors, distributors, and retailers, such relationships are not possible. A common theme in AFSs is an attempt to re-embed agricultural production and exchange in social relationships.[78] One type of AFS that attempts to do this explicitly is the short food supply chain (SFSC).

In contrast to the foods delivered by the CFS, SFSC foods are intentionally embedded with social information such as how, where, and by whom a food product was produced.[79] When these goods are sold, the act of exchange is perceived to be situated within a social relationship rather than completely alienated.[80] SFSCs can end in three

kinds of exchanges: face to face transactions between producers and consumers, exchanges between local middleman and local consumers, and transactions between nonlocal middlemen and consumers with a product that remains encoded with some kind of information about its context of production.[81] The first two kinds of exchanges create the most opportunity for economic exchanges to be experienced as situated in a social relationship and are understood to have the shortest relational distance.[82] Thus, the SFSC structurally differentiates itself from the CFS through the elimination, reduction, or social contextualization of middlemen in the food supply chain, provisioning food products that also deliver social relationships and trust. The relational closeness that defines SFSCs confers upon consumers a direct role in what and how producers provision--a power that SFSC producers themselves confirm exists.[83] Relational closeness allows consumers to communicate directly the values they want embodied in their foods and also confirm through questioning and observation that these values are present.[84] This degree of perceived control and transparency is impossible in the CFS due to the lack of contextual information delivered with a commodity product and the relational distance between producers and consumers.

The act of participating in SFSCs is also thought to have wide ranging benefits in terms of community and economic development. SFSCs provide a viable market for small scale farmers who cannot feasibly produce commodity products in the competitive CFS. For the time being, CFS producers have not been able to supply the kinds of values demanded by SFSC consumers.[85] As previously discussed, communities with higher proportions of small and medium scale operations have been shown to score higher on

measurements of quality of life and civic engagement.[86] The economic sustainability of these communities is improved if there are many farms participating in the first two kinds of SFSC exchanges. This is because these transactions result in a higher proportion of the food dollar being awarded to the farmer which returns to the farmers' communities and can be spent there.[87] Economic transactions through SFSC market venues such as farmers' markets have also been shown to produce an economic multiplier effect, meaning that for every dollar of income received at a farmers market, additional income and jobs are generated elsewhere in the community.[88] SFSC farms can also contribute to environmental sustainability. This is partially due to the role of the producer-consumer relationship in SFSCs. SFSC farmers must meet the specialized demands of their particular consumers, and though the values that consumers seek to find embedded in their foods vary, there are patterns of demand in SFSCs that have emerged such as a preference for organic, sustainable, or humane foods.[89]

Methods

When I began my research I intended to identify indicators of success of farms participating in SFSCs. I developed a very broad range of semi-structured interview questions asking about farm history, evolution, farmer goals, and motivations. I recorded nineteen interviews with vegetable and diversified vegetable farmers who operated near Burlington or Montpelier, Vermont. The sample was stratified into three categories of farmer experience. I interviewed roughly equal numbers of farmers who had been farming less than four years, between four and eight years, and more than eight years. I intended to use this structure to observe any temporal patterns in farm evolution. Initially,

I interviewed farmers who had previously participated in University of Vermont studies, but subsequently I used snowball sampling methods to identify potential interviewees. At the end of my interviews I asked farmers if they knew any farmers who fit my requirements. This method was particularly useful for identifying farmers who had not yet built a significant reputation or market presence. The interviews ranged in length from as short as half an hour to as long as two hours, though most were about an hour long. Most of the interviews occurred at the farms during the winter and early spring months of 2014. Two of the interviews were done over the phone, and three other interviews were done in-person but away from the farm.

After conducting a majority of my interviews, I selected a farm from each experience category on which to carry out participant observation. I worked for two days on each of these farms during the farming season. While working I had plenty of opportunities to ask questions of both the operators and employees and to take copious field notes in an ethnographic style. My main goal was to give depth to or corroborate data gathered during my interviews. As my research progressed, I transcribed the interviews using HyperTRANSCRIBE and did categorical coding based on farm and farmer characteristics. Upon completion of the interviews, I began to reflect on the interviews using a thematic coding approach in HyperRESEARCH.[90]

Results

Soon after beginning my interviews, I realized several things. First, every farmer thought he or she was successful or on track to success. Second, success meant something different to every farmer. Third, and perhaps most importantly, the previous conclusions

forced me to acknowledge that I had expectations about how SFSC farmers should operate. These notions were derived from my dichotomous framing of the CFS and the AFS being aligned with disembedded and embedded goals and management strategies. The reality of the situation was that some SFSC farmers seemed to prioritize substantive goals--that is, economic activity was a means for achieving noneconomic socially defined objectives--while others seemed to prioritize formal rationality--the economic success of the farm as an end in and of itself. For other farmers, these two goals were often both held and were in tension with each other. There were many instances throughout each interview when the influence of formal or substantive rationality was apparent, from the motivation to start farming, to marketing decisions, to farm goals. These realizations caused me to reevaluate my research plan. To identify indicators of success for this diverse group of producers would be misguided because their motivations, goals, and definitions of success are not defined by any essential quality of their operation or the market in which they participate. Subsequently, I returned to the literature where I found that this conclusion has already been discussed.

Discussion

Granovetter called into question the dichotomous framing of disembedded and embedded economies posited by Polanyi.[91] Granovetter argued that modern economic activity is never wholly disembedded, and neither were preindustrial economies ever wholly embedded.[92] He supported his argument by examining ways in which social relationships inform and constrain the supposedly independent logic of the free market in modern societies.[93]

Fred Block further refines the argument of the always embedded economy by positing that the consideration of embeddedness--the importance of social relations and expectations--is in tension with considerations of marketness--the importance of price--and instrumentalism--the importance of individual substantive goals--in every economic transaction.[94] Depending on the unique characteristics of the actors and context of the transaction, the degree to which embeddedness, marketness, and instrumentalism play a role in a transaction varies. While embeddedness is opposed to marketness and instrumentalism, it does not preclude them, and all could play a role in a given economic transaction.[95] Thus, Granovetter and Block completely do away with the notion of a society shaped and constrained by an independent market logic or completely constrained by the expectations of society. Instead, economic decisions are always embedded in society, and individuals are independently acting upon prioritization of marketness, instrumentalism, and embeddedness in every economic exchange.

Clare Hinrichs brings Block's interpretation of economic exchange to bear on AFSs, using it to dismantle their posited alterity based on embeddedness.[96] If embeddedness can be found to influence the workings of the broader rational market and CFS, Hinrichs asks, could marketness and instrumentalism be found in the supposedly hyper-embedded exchanges of the AFS?[97] By observing economic exchanges at farmers' markets and CSAs, two of the most relationally proximal types of AFS exchanges, Hinrichs determines that instrumentalism and marketness are present.[98] Thus, "embeddedness should not be seen as the friendly antithesis of the market."[99] The rationalizing of economic exchanges through these three competing variables explains

what appeared to be goals that seemed to me to be incongruous with an embedded producer, something that Hinrichs also notes.[100]

My research was initially driven by a belief that AFSs and CFSs were paradigmatically differentiated. I was searching for a fundamental difference from which the structure and benefits of AFSs emerged. As my studies progressed, I examined farm scale, supply chains, and ultimately embeddedness as this differentiating element. This essentializing impulse was first brought into question by my research interviews and then thoroughly dismantled by the scholarship of others. Both the CFS and the AFS are participating in the same economic paradigm of food production where marketness, instrumentalism, and embeddedness play a role in every transaction. AFSs can certainly provide benefits to communities and the environment, but these benefits are not guaranteed by any kind of market organization. Rather, the values of both producers and consumers need to be aligned towards generating desired beneficial impacts, and the products of such activities need to be both affordable and profitable. To simply expand a certain kind of supply chain or production strategy is too simplistic of an approach for encouraging food system sustainability. To achieve sustainability we must use systems thinking to identify and reinforce positive feedback loops that generate desired outcomes while removing negative feedback loops that impede progress.

Recommendations for Further Research

David Conner and Ralph Levine use a systems approach to show how a community based food system can generate positive outcomes and suggest places to intervene in the food system to spur wider and persistent change.[101] Conner and Levine

recommend such diverse interventions as increasing local food accessibility, creating the regulatory, educational, and economic infrastructure to support community food systems, and nutrition and food system education for children and consumers to change consumer values.[102] In Vermont, much of this support is already in being implemented with the state, academia, and institutions working together to build sustainable food systems.[103] While interest in SFSCs is growing around the country, few states have been as committed to supporting and expanding them as Vermont. It would be useful to use the interpretive framework of embeddedness, marketness, and instrumentalism to examine how SFSC producers negotiate tensions between formal and substantive rationality in this supportive yet increasingly competitive environment. Doing so may reveal challenges SFSC farmers will continue to face in trying to operate socially conscious and commercially competitive operations and real world strategies they use to overcome them. Perhaps more importantly, in this more developed local food system, we may be able to see if the values that are mistakenly attributed to an essential quality of SFSCs can persist as these systems expand. This information could be used to guide future systems interventions aimed at maintaining the benefits that SFSCs can provide.

---

1. Jack Kloppenburg et al., "Tasting Food, Tasting Sustainability: Defining the Attributes of an Alternative Food System with Competent, Ordinary People," Human Organization 59, no. 2 (2000): 179.

2. Hans R. Herren, Agriculture: Investing in Natural Capital (United Nations Environmental Programme, 2011), 38-43; Fred Kirschenmann et al., "Why Worry about the Agriculture of the Middle" (2000): 1-4, 11-16, www.agofthemiddle.org; Thomas A. Lyson, Civic Agriculture: Reconnecting Farm, Food, and Civil Society (Lebanon, NH: University Press of New England, 2004), 8-60; National Commission on Small Farms, A Time to Act: A Report of the USDA National Commission on Small Farms (U.S. Department of Agriculture, 1998), 10-14.

3. Henk Renting, Terry K Marsden, and Jo Banks, "Understanding Alternative Food Networks: Exploring the Role of Short Food Supply Chains in Rural Development," Environment and Planning 35, no. 3 (2003): 395–98, doi:10.1068/a3510.

4. Elizabeth Barham, "Social Movements for Sustainable Agriculture in France: A Polanyian Perspective," Society & Natural Resources 10, no. 3 (1997): 242, doi:10.1080/08941929709381023.

5. Renting, Marsden, and Banks, "Understanding Alternative Food Networks," 395-98.

6. Noah Zerbe, "Moving from Bread and Water to Milk and Honey: Framing the Emergent Alternative Food Systems," Humboldt Journal of Social Relations 33, no. 1/2 (2010): 6-7.

7. Barham, "Social Movements for Sustainable Agriculture," 239-40.

8. Ibid., 240; Michele Cangiani, "Karl Polanyi's Institutional Theory: Market Society and Its 'Disembedded' Economy," Journal of Economic Issues 45, no. 1 (March 1, 2011): 179–181, doi:10.2753/JEI0021-3624450110.

9. Ibid., 182.

10. Fred Block, Postindustrial Possibilities (Los Angeles: University of California Press, 1990), 26-29.

11. Ibid., 47.

12. Ibid.

13. Barham, "Social Movements for Sustainable Agriculture," 240.

14. Cangiani, "Karl Polanyi's Institutional Theory," 180-81.

15. Block, Postindustrial Possibilities, 39.

16. Ibid.

17. Cangiani, "Karl Polanyi's Institutional Theory," 182.

18. Ibid., 179.

19. Ibid., 182.

20. Lyson, Civic Agriculture, 8-12.

21. Ibid.

22. Ibid.

23. Ibid.

24. Ibid.

25. Mark Granovetter, "Economic Action and Social Structure: The Problem of Embeddedness," The American Journal of Sociology 91, no. 3 (1985): 492.

26. Lyson, Civic Agriculture, 14.

27. Cangiani, "Karl Polanyi's Institutional Theory," 182.

28. Ibid.

29. Lyson, Civic Agriculture, 15-30.

30. Ibid.

31. Ibid., 18.

32. Ibid.

33. Barham, "Social Movements for Sustainable Agriculture," 241-42.

34. Richard A. Levins and Willard W. Cochrane, "The Treadmill Revisited," Land Economics 72, no. 4 (1996): 550–52.

35. Ibid.

36. Kirschenmann et al., "Why Worry about the Agriculture," 1-2.

37. Levins and Cochrane, "The Treadmill Revisited," 552-53.

38. Ibid.

39. Ibid.

40. Ibid.

41. Ibid.; Lindsey Lusher Shute, Building a Better Future with Farmers: Challenges Faced by Young, American Farmers and a National Strategy to Help Them Succeed (National Young Farmer's Coalition, 2011), 4.

42. National Agricultural Statistics Service, 2012 Census of Agriculture: Preliminary Report - U.S. and State Data (United States Department of Agriculture, 2014), 1, http://www.agcensus.usda.gov/Publications/2012/.

43. Robert A. Hoppe, James M. MacDonald, and Penni Korb, Small Farms in the United States: Persistence Under Pressure (U.S. Department of Agriculture, Economic Research Service, 2010), 1; National Agricultural Statistics Service, 2012 Census of Agriculture, 1.

44. Ibid., 16.

45. Walter Goldschmidt, Small Business and the Community: Report of the Smaller War Plants Corporation to the Special Committee to Study Problems of American Small Business. (U.S. Government Printing Office, 1946); Thomas A. Lyson, Robert J. Torres, and Rick Welsh, "Scale of Agricultural Production, Civic Engagement, and Community Welfare," Social Forces 80, no. 1 (2001): 311–27; Lyson, Civic Agriculture, 61-83; C. Wright Mills and Melville Ulmer, Small Business and Civic Welfare: Report of the Smaller War Plants Corporation to the Special Committee to Study Problems of American Small Business. (U.S. Government Printing Office, 1946).

46. Lyson, Torres, and Welsh, "Scale of Agricultural Production," 320-25; Lyson, Civic Agriculture, 61-83.

47. Sonya Salamon, Prairie Patrimony: Family, Farming, and Community in the Midwest (Chapel Hill, NC: University of North Carolina Press, 1992), 1-37.

48. Ibid., 91-116.

49. Ibid., 226-248.

50. Ibid.

51. Ibid.

52. Ibid.

53. Ibid.

54. Kirschenmann et al., "Why Worry about the Agriculture," 1-2; Lyson, Torres, and Welsh, "Scale of Agricultural Production" 311-27; Lyson, Civic Agriculture, 61-83; National Commission on Small Farms, A Time to Act, 8.

55. Ibid., 14.

56. Ibid.

57. Ibid.

58. Patrick Canning, A Revised and Expanded Food Dollar Series: A Better Understanding of Our Food Costs, 2011, 2.

59. Lyson, Civic Agriculture, 52-3.

60. Herren, Agriculture: Investing in Natural Capital, 40.

61. Doug Boucher et al., The Root of the Problem: What Is Driving Tropical Deforestation Today? (Cambridge, MA: Union of Concerned Scientists, 2011), 8; Herren, Agriculture: Investing in Natural Capital, 40, 50; Fred Magdoff and Harold van Es, Building Better Soils for Better Crops, 2nd ed. (Burlington, VT: Sustainable Agriculture Network, 2000), 3-7; David Tilman et al., "Agricultural Sustainability and Intensive Production Practices," Nature 418 (2002): 671–76; University of Leeds, "Possible Causes of Polinator Declines," 2014, http://www.agriland.leeds.ac.uk/about/causes.php; Clevo Wilson and Clem Tisdell, "Why Farmers Continue to Use Pesticides despite Environmental, Health and Sustainability Costs," Ecological Economics 39, no. 3 (2001): 449–462, doi:10.1016/S0921-8009(01)00238-5.

62. David Wallinga, "Agricultural Policy and Childhood Obesity: A Food Systems and Public Health Commentary," Health Affairs 29, no. 3 (2010): 406, doi:10.1377/hlthaff.2010.0102.

63. Cynthia L. Ogden et al., "Prevalence of Childhood and Adult Obesity in the United States, 2011-2012.," JAMA: Journal of the American Medical Association 311, no. 8 (2014): 809, doi:10.1001/jama.2014.732.

64. Wallinga, "Agricultural Policy and Childhood Obesity," 405-6.

65. Ibid.

66. Alexandra E. Evans et al., "Introduction of Farm Stands in Low-Income Communities Increases Fruit and Vegetable among Community Residents.," Health & Place 18, no. 5 (2012): 1137–38, doi:10.1016/j.healthplace.2012.04.007.

67. Ibid.

68. Thomas Lehnert et al., "Economic Costs of Overweight and Obesity," Best Practice & Research Clinical Endocrinology & Metabolism 27, no. 2 (2013): 112, doi:10.1016/j.beem.2013.01.002.

69. Wilson and Tisdell, "Why Farmers Continue to Use Pesticides despite Environmental, Health and Sustainability Costs," 449-60.

70. Renting, Marsden, and Banks, "Understanding Alternative Food Networks," 395; Theresa Selfa and Joan Qazi, "Place, Taste, or Face-to-Face? Understanding Producer–Consumer Networks in 'Local' Food Systems in Washington State," Agriculture and Human Values 22, no. 4 (2005): 451–464, doi:10.1007/s10460-005-3401-0; G.W. Stevenson et al., "Midscale Food Value Chains: An Introduction," Journal of Agriculture, Food Systems, and Community Development 1, no. 4 (2011): 29.

71. Phil Mount, "Growing Local Food: Scale and Local Food Systems Governance," Agriculture and Human Values 29, no. 1 (2011): 108-11, doi:10.1007/s10460-011-9331-0; Selfa and Qazi, "Place, Taste, or Face-to-Face?" 452-53.

72. Renting, Marsden, and Banks, "Understanding Alternative Food Networks," 385-98.

73. Mount, "Growing Local Food," 114; Renting, Marsden, and Banks, "Understanding Alternative Food Networks," 395.

74. Granovetter, "Economic Action and Social Structure," 484.

75. Mount, "Growing Local Food," 113.

76. Granovetter, "Economic Action and Social Structure," 489.

77. Ibid., 490.

78. Barham, "Social Movements for Sustainable Agriculture," 241.

79. Renting, Marsden, and Banks, "Understanding Alternative Food Networks," 398-400; Terry Marsden, Jo Banks, and Gillian Bristow, "Food Supply Chain Approaches: Exploring Their Role in Rural Development," Sociologia Ruralis 40, no. 4 (2000): 424-25; Nancy J. Ross, "How Civic Is It? Success Stories in Locally Focused Agriculture in Maine," Renewable Agriculture and Food Systems 21, no. 02 (2007): 115, doi:10.1079/RAF2005134.

80. Mount, "Growing Local Food," 114-115.

81. Marsden, Banks, and Bristow, "Food Supply Chain Approaches," 425-26.

82. Ross, "How Civic Is It?" 114.

83. Ibid., 120.

84. Mount, "Growing Local Food," 114.

85. Kirschenmann et al., "Why Worry about the Agriculture," 11.

86. Lyson, Torres, and Welsh, "Scale of Agricultural Production," 311-27; Lyson, Civic Agriculture, 61-83; Ross, "How Civic Is It?" 115; Peter Rosset, The Multiple Functions and Benefits of Small Farm Agriculture (Oakland: Food First/The Institute for Food and Development Policy, 1999), 2-3; National Commission on Small Farms, A Time to Act, 12-13.

87. Fred Gale, "Direct Farm Marketing as a Rural Development Tool," Rural Development Perpectives 12, no. 2 (1992): 20.

88. Steve Martinez et al., Local Food Systems: Concepts, Impacts, and Issues (U.S. Department of Agriculture, Economic Research Service, 2010), 43-44.

89. Gilbert W. Gillespie and Sue Ellen Johnson, "Success in Farm Start-Ups in the Northeastern United States," Journal of Agriculture, Food Systems, and Community Development 1, no. 1 (2010): 30; Renting, Marsden, and Banks, "Understanding Alternative Food Networks," 395.

90. Virginia Braun and Victoria Clarke, "Using Thematic Analysis in Psychology," Qualitative Research in Psychology 3 (2006): 77–101.

91. Granovetter, "Economic Action and Social Structure," 481-510.

92. Ibid.

93. Ibid., 490, 495.

94. Block, Postindustrial Possibilities, 46-73.

95. Ibid.

96. C. Clare Hinrichs, "Embeddedness and Local Food Systems: Notes on Two Types of Direct Agricultural Market," Journal of Rural Studies 16 (2000): 295–303.

97. Ibid., 296.

98. Ibid., 301.

99. Ibid., 296.

100. Ibid., 298.

101. Conner and Levine, "Circles of Association: The Connections of Community-Based Food Systems," Journal of Hunger & Environmental Nutrition 1, no. 3 (2006): 6-15, doi:10.1300/J477v01n03

102. Ibid.

103. Vermont Sustainable Jobs Fund, Farm to Plate Strategic Plan, 2013, 15, doi:10.1093/annonc/mdu083.

CHAPTER 4: DIFFERING MOTIVATIONS FOR PRODUCER PARTICIPATION IN SHORT FOOD SUPPLY CHAINS

There is growing concern on behalf of producers and consumers with respect to perceived negative impacts of the conventional food system (CFS) (Renting, Marsden, & Banks, 2003; Selfa & Qazi, 2005; Turner & Hope, 2015). Some of these impacts are tangible, including environmental damage, vanishing farmer livelihoods and rural communities, human health impacts, and social justice issues (Kirschenmann, Stevenson, Buttel, Lyson, & Duffy, 2000; Mares & Alkon, 2011; Salamon, 1992; Tilman, Cassman, Matson, Naylor, & Polasky, 2002). Other impacts are more existential, including a sense of alienation from production, a lack of transparency and trust, and a yearning for more authentic foodways (Mount, 2011; Paxson, 2012; Turner & Hope, 2015). Both types of impacts are linked to the increasing globalization of the food system and the dominance of long food supply chains (Turner & Hope, 2015). Alternative food systems (AFS), organized to challenge a value or ameliorate a negative impact of the conventional food system, have emerged to meet a consumer demand for products that assuage these concerns.

One strategy that pervades many alternative food system schemes is to respatialize and resocialize agricultural production and exchange (Turner & Hope, 2015). Respatializing refers to situating agricultural production closer to the site of economic exchange and consumption. Resocialization refers to embedding the economic exchange within the context of a social relationship. This quality of social contextualization is called social embeddedness by economic sociologists. Social and physical proximity

between producers and consumers results in food products or economic exchanges that are embedded with more information about the context of production than is normally delivered by the conventional food system (Renting et al., 2003). Numerous social, environmental, and economic benefits have been ascribed to more socially and spatially proximal modes of exchange when compared to the increasingly alienated exchanges of the CFS.

Food that is transmitted with more information regarding its context of production allows consumers to make informed purchasing choices based on environmental, social, health, or economic attributes which concern them. Provisioning this information to certain consumers also gives farmers a way to profit from these values that are not rewarded in commodity markets (Turner & Hope, 2015). Other potential benefits of AFSs include community economic development. These benefits are achieved by keeping economic exchanges local, cutting profit taking middlemen out of the supply chain, and even generating additional economic activity, an effect called an economic multiplier (Canning, 2011; Martinez et al., 2010). Perhaps more controversially, it has been argued that communities with more spatially and socially proximal businesses score higher on quality of life indicators and experience higher rates of civic engagement (Goldschmidt, 1946; Lyson, 2004; Mills & Ulmer, 1946). Short food supply chains (SFSC) are a type of AFS that intend to achieve the outcomes listed above (Marsden, Banks, & Bristow, 2000).

There are three kinds of SFSCs each enabling a lesser degree of social proximity (Marsden et al., 2000). First, there are those that terminate in face-to-face transactions

between producers and consumers. Second, there are exchanges between local middleman and local consumers, which are termed spatially proximal. Third, there are spatially extended transactions, which entail transactions for products that contain information about their context of production, however the transaction occurs between nonlocal middlemen and consumers (Marsden et al., 2000). These three types of exchanges currently manifest themselves in a number of ways such as farmers markets, roadside stands, community supported agriculture (CSA), online catalogues, local wholesale and retail operations, and more. As SFSCs have gained popularity, there have been some who have called for a critical examination of their purported benefits.

There are many indications that efforts to create the structural conditions that engender spatial and social proximity between producers and consumers do not necessarily achieve the outcomes that consumers and others assume they do. It has been demonstrated that consumers make many assumptions about a product's context of production and producer adherence to the consumer's value system simply as a result of the product being spatially proximal, or in more common language, local (Turner & Hope, 2015). Consumers have been shown to believe that local food is fresher, of higher quality, more natural, and less environmentally impactful than food purchased through spatially extended conventional supply chains (Turner & Hope, 2015). These assumptions have been shown to not necessarily be true. These studies begin to suggest that consumers conflate the structure of an exchange with certain outcomes values, or impacts, though they do not take the initiative to and may not have a way to test those assumptions.

Similarly, consumers may be susceptible to making assumptions with respect to social proximity. Short food supply chains are supposed to enable consumers to interrogate producers about the methods used in the production of and values embodied in their food purchases. However, some research suggests that consumers in SFSCs are liable to be predisposed to trust producers in direct exchanges, rather than generate trust through relationship building (Mount, 2011). Thus, it seems that even trust, which is supposed to be an outcome of a process, is perceived to be an inherent quality of the type of exchange. In addition, despite placing an emphasis on social proximity, SFSCs have at times been shown to be neglectful of the broader social good, perpetuating white privilege, unequitable distribution, and other harmful social dynamics (Turner & Hope, 2015).

Some argue that assumptions that certain values and outcomes are an inherent quality of SFSCs arise from an inappropriate dichotomous framing of the AFS as being opposed, superior, and fundamentally different from the CFS (McClintock, 2014). This paradigmatic differentiation frames CFSs as embodying the values of centralization, dependence, competition, domination of nature, specialization, and exploitation (Bues & Dunlap, 1990). AFSs on the other hand, are perceived to embody such values as decentralization, independence, community, harmony with nature, diversity, and restraint (Bues & Dunlap, 1990). These socially constructed frameworks for characterizing these two food systems seem to reflect Karl Polanyi's formulation of two opposing types of economic rationality: formal and substantive. Formal rationality is the pursuit of individual gain maximization as measured by calculable means—the pursuit of which

emphasizes many of the values outlined in the above characterization of the CFS (Barham, 1997; Cangiani, 2011). Substantive rationality, on the other hand, informs decisions motivated by societal needs and expectations, such as religious, interpersonal, or kinship obligations. It is with this form of rationality that the characterization of the AFS seems to align (Barham, 1997). That AFSs are in fact fundamentally different has been called into question by many.

One argument to the contrary is that AFSs are aligned with the same formalist neoliberal paradigm that underlies the CFS that they purport to challenge (Mares & Alkon, 2011; McClintock, 2014). As a result, AFSs are argued to perpetuate many of the same social inequalities imposed by the CFS and distract motivated individuals from pursuing more radical change (Mares & Alkon, 2011). Additionally, there is evidence that even in AFS markets, participants make many of the same formal rationalizations that take place in spatially and socially extended CFS transactions (Block, 1990; Hinrichs, 2000). Though it is likely that social and spatial proximity can play a role in mediating market logic in AFS exchanges, it seems that is not a given quality of that exchange. A similar line of reasoning is pursued by Born and Purcell (2006), who caution against any assumption of a causal relationship between the scale of food system structures and any kind of function or benefit. Yet still, there are those who argue that benefits can be had (Lyson, 2004; Ross, 2007). In truth, the reality of food systems is likely more nuanced than either a binary opposition or a complete lack of difference between CFSs and AFSs (McClintock, 2014).

Given that structural arrangements such as supply chains or farm scale do not necessitate the presence or delivery of certain values, practices, or system outcomes, one cannot make assumptions about the values, motivations, and practices of producers engaging in these supply chains. There is, in fact, a lack of in-depth qualitative studies of this nature (Turner & Hope, 2015). Therefore, this paper seeks to examine the varying motivations that farmers participating in Vermont SFSCs have for engaging in their markets. It does not seek to cast doubt on the quality of their intentions, but rather challenge the assumptions that consumers may impose on the motivations of producers in AFSs. By examining the nuanced reality of decision making in these supply chains, insights can be gained on how they can and have evolved, and will allow academics, farmers, and policy makers to make more informed decisions regarding them.

Methods

In this study, nineteen semi-structured interviews were conducted by the author with vegetable and diversified vegetable farmers who operated near Burlington or Montpelier, Vermont, and participated in SFSCs. Initially, farmers who had previously participated in University of Vermont studies were interviewed, but subsequently snowball sampling methods were used to identify potential interviewees. This method was particularly useful for identifying farmers who had not yet built a significant reputation or market presence. The interviews ranged in length from as short as half an hour to as long as two hours, though most were about an hour long. Most of the interviews occurred at the farms during the winter and early spring months of 2014. Two of the interviews were done over the phone, and three other interviews were done in-

person but away from the farm. Interviews were transcribed with HyperTranscribe, and these transcripts were coded with HyperResearch.

Contemporaneous to the interview process, participant observation was conducted on three farms. The farms were selected in order to represent the range of farm size and farmer experience contained in the study sample (See Table 2). Two days were spent working alongside the selected farmers and their employees. There were many opportunities to ask questions and take copious notes. Insights gained from the participant observation helped to support and inform the analysis.

Analysis

Qualitative data coding was conducted in two stages using methods outlined in *The Coding Manual for Qualitative Researchers* (Saldana, 2013). First cycle coding methods, which were used to gain familiarity with the data and identify potential themes, began while farmer interviews and participant observation were still being conducted. Two first cycle coding strategies were used. First, attribute coding was done to pull out farm and farmer characteristics such as farm type, size, farmer experience, age, market participation and additional demographic features. Second, a form of exploratory coding known as holistic coding was undertaken to gain familiarity with the data. These holistic codes identified general farmer goals, challenges, and motivations. After all the data were collected and had been attribute and holistically coded, a second cycle coding scheme which classified and organized first cycle codes was developed. This second cycle coding technique known as structural coding organized the holistic codes into an analytical framework discussed below.

The holistic codes and the participant observation revealed incongruities in some farmers' motivations for participating in SFSC markets. Within individual and between interviews, some farmers seemed to hold contradictory goals. A structural coding framework based the theoretical arc of Grannovetter, Block, and Hinrichs was developed to parse out and organize these internal contradictions.

The first order of codes indicated what kind of SFSC market venue was being discussed: a face-to-face market, a spatially proximal market, or a spatially extended market. The second order of codes indicated whether the motivation was a positive motivation to participate or a negative motivation to reduce or avoid participation in a market. Next, the type of rationality informing the motivation was coded as being marketness, instrumentalism, or embeddedness. Later, this order of codes was recoded back into broader categories of formal and substantive rationality because it simplified the analysis, and marketness and instrumentalism—both informed by formal rationality--are often equally weighted. Finally, the actual motivations identified through the holistic first cycle coding process were lumped together using a second cycle coding technique called pattern coding to identify relevant themes. These pattern codes were embedded in the structural coding framework so that their relationships to each other were made apparent. Figure 1 shows the overall organization of the final coding scheme.
Each farm and its attributes are linked to the structural codes in Table 2.

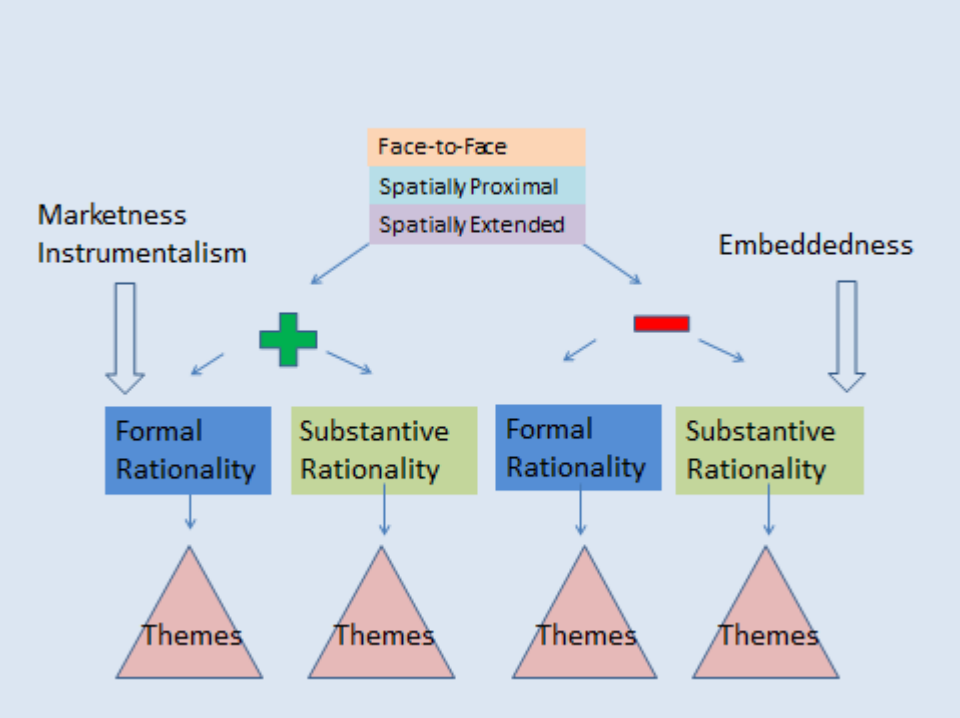

Figure 4. Shows the operational model diagram used to code farmer motivations for participating in SFSC markets. The structure will frame the results below.

Results

Before delving into the results of the study, a few cautionary notes are in order. First, it is at times difficult to disentangle when a motivation to participate in a certain market is entirely based on formal rationality or substantive rationality. This is because the two types of rationality are not mutually exclusive and can both be motivating an economic decision (Block, 1990). Thus, it is possible for a farmer's stated motivation to take on multiple meanings and be interpreted in different ways. Indeed, highlighting the nuanced and complicated nature of AFS farmer decision making is one of the purposes of this study. Therefore, the themes drawn from the comments highlighted below can often be interpreted as being motivated by both formal and substantive rationality, and they likely are. Indeed, there were some instances when farmers themselves had difficulty

articulating the reasoning behind a particular practice, encountering their own internal contradictions. Second, the proportions of farmers interpreted to be motivated by one form of rationality or another should be interpreted as internal to this study in this particular political and geographic area. The intention is to demonstrate that farmers participating in AFSs are motivated by multiple forms of rationality and illuminate the actions and beliefs that are motivated those rationalizations.

Table 1.
Descriptive Statistics For Sample

	Minimum	Maximum	Mean
Farmer Age	25	66	42
Years Running Current Farm Operation	0	28	10
Total Farm Acreage	4	500	91
Farm Acreage For Vegetable Growing	1	53	14
	Frequency	Percent	
Principle Operator Female	4	21	
Principle Operator Male	6	32	
Farm Couple, (F-F, or M-F)	9	47	

Note. n=19, This table shows the descriptive statistics for the study sample. The farmers sampled are sixteen years younger and include more female operators than the national average. The farms are also smaller than the national and state averages (National Agriculture Statistics Service, 2014).

Table 2

Farmer Attributes, Market Participation, and Market Motivations

Farmer 1: Medium Scale, Beginning Farmer, Young

	Face-to-Face Markets: Farmers Market, CSA (Discontinued)		Spatially Proximal Markets: Coops, Restaurants		Spatially Extended Markets: No Participation	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Cash Flow	Inefficiency (Overdiversification)	Feedback and Support	Inefficiency (Deliveries, Low Prices, Ready to Eat)	-	-
Substantive	-	-	-	-	-	-

Farmer 2: Large Scale, Experienced Farmer, Elder

	Face-to-Face Markets: Farmers Market, CSA on farm, CSA off farm (all reduced participation)		Spatially Proximal Markets: Coops, Grocery Stores, Schools, Restaurants, Institutions		Spatially Extended Markets: Regional Distributors	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Cash Flow (CSA), Authenticity and Marketing	Competition (Horizontal and Vertical), Inefficiency (Low Volume, Bad Markets)	Financial Viability (volume of sales), Efficiency, Convenience, Transaction Costs (Less Time Per Unit, More Time on Farm)	Inefficiency (Institutions: Low Volumes, Low Prices. Restaurants: Inconsistent/unreliable)	Efficiency, Convenience, Transaction Costs	Price Competition
Substantive	-	-	-	-	-	-

Farmer 3*: Small Scale, New Farmer, Young

	Face-to-Face Markets: CSA (discontinued)		Spatially Proximal Markets: Specialty Stores, Restaurants		Spatially Extended Markets: Regional Distributors	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Higher Prices, Authenticity and	Inefficiency: (Labor Costs, Bad Markets,	Efficiency, Convenience,	Low Prices: Restaurants,	Efficiency, Convenience,	Lower Prices, Not Scale

	Marketing, Community Support, Cash Flow	Waste, Overdiversification)	Transaction Costs (Less Time Per Unit, Low Product Diversity, More Time on Farm), Predictability and Reliability, Financial Viability (Volume of Sales), Price	Institutions Inefficiency: Restaurants Unreliable: Restaurant	Transaction Costs (More time on Farm), Financial Viability (Higher Volume of Lower Diversity of Products)	Appropriate, Low Prices, Price Competition, Transaction Costs (Packaging, Food Safety Standards)
Substantive	Commitment to Community (Participate in local food movement)	-	-	-	-	Commitment To Local

Farmer 4*: Large Scale, Experienced Farmer, Middle Age

	Face-to-Face Markets CSA (expanded), Farmers Markets (reduced), Unstaffed Farm Store		Spatially Proximal Markets Coops (Expanded), Specialty Stores, Restaurants		Spatially Extended Markets No Participation	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Authenticity and Marketing, Cash Flow, Stability and Predictability (CSA), Product Differentiation, Low Risk, Growth Opportunity	Inefficiency (Labor Costs, Operator presence required, Time and Effort), Competition (Horizontal)	Predictability and Reliability, Financial Viability (Volume of Sales), Efficiency Convenience, Transaction Costs (Time Per Unit, More Time With Family), Flexibility, Marketing and Advertising	-	-	-
Substantive	Customer Interaction,	-	Relationships, Commitment to	-	-	Commitment to Local

	Consumer Education (Teach The Food System), Commitment to Community (Feed My Neighbors)		Community			

Farmer 5: Large Scale, Experienced Farmer, Middle Age

	Face-to-Face Markets CSA, Staffed Farm Store, Farmers Market (Discontinued)		Spatially Proximal Markets Coops, Grocery Stores (Discontinued)		Spatially Extended Markets Regional Distributors	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Higher Prices(Farm Store)	Inefficiency (Farmers Markets, Restaurants: low volumes, logistics), Competition (Farmers Markets, CSAs),	Financial Viability Higher Price (Than Spat. Prox.)	-	Financial Viability (Large Volumes), Low Transaction Costs, Predictability and Flexibility	Lower Margins, Price Competition
Substantive	-	-	-	-	-	-

Farmer 6: Small Scale, New Farmer, Young

	Face-to-Face Markets (Farm no longer operating) Farmer Market, Off Farm CSA		Spatially Proximal Markets No Participation		Spatially Extended Markets No Participation	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Community Support, Stability and Predictability (CSA), Growth Opportunity (Small	-	-	Financial Viability (Low Prices)	-	-
Substantive	Commitment to Community (Feed My Neighbors,	-	-	Lack of Relationships	-	-

	Foster Community Interaction), Customer Interaction, Consumer Education					

Farmer 7: Medium Scale, Beginning Farmer, Middle Age

	Face-to-Face Markets Farmer's Market (Reduced)		Spatially Proximal Markets Coops (Expanded), Restaurants (Expanded)		Spatially Extended Markets No Participation	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Customer Education (Product Familiarity), Low Risk, Authenticity and Marketing	Inefficiency (Farmers Markets: Irregular Volume of Sales)	Financial Viability (Growth Potential, Volume of Sales) Feedback and Support	Inefficiency (Restaurants: Low Volumes, Inconsistent, Self - Delivery)	Efficient (No Delivery)	Not Scale Appropriate
Substantive	Commitment to Community	-	Relationships, Commitment to Community (Participate in Local Food System)	-	-	Lack of Relationships

Farmer 8: Medium Scale, Experienced Farmer, Young

	Face-to-Face Markets Unstaffed Farm Store, Farmers Market		Spatially Proximal Markets Specialty Stores (Minimal)		Spatially Extended Markets No Participation	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Community Support, Higher Prices, Low Risk (Unstaffed Farm Store, Farmer's Market), Authenticity and Marketing	Competition, Inefficiency (Farmers Market :Time and Energy)	Efficiency, Convenience, Transaction Cost (Less Time Per Unit), Flexibility (Wholesale as Overflow)	Financial Viability (Low Prices) Inefficient (Search Costs)	-	-

Substantive	Commitment to Community(Give Back, Feed Neighbors) , Community Interaction	-	-	-	-	-

Farmer 9: Large Scale, Beginning Farmer, Middle Age

	Face-to-Face Markets Farmers Market (Reduced), CSA (Constant)		Spatially Proximal Markets Coops, Grocery Stores, Institutions (Expanded), Restaurants		Spatially Extended Markets No Participation	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Cash Flow, Product Differentiation (CSA), Authenticity and Marketing	Competition, Inefficient (Overdiversification)	Efficiency, Convenience, Transactions Costs (Less Time Per Unit), Financial Viability (Retail: Growth Potential. Volume of Sales,. Institutions: Growth Potential), Price, Flexibility	-	-	-
Substantive	Community Interaction, Commitment to Community (Foster Community Interactions, Stewardship, Consumer Education)	-	Commitment to Community (Participate in Local Food system)	-	-	-

Farmer 10: Large Scale, Experienced Farmer, Elder

	Face-to-Face Markets Farmers Market, Staffed Farm Store (Expanded), CSA (Discontinued)		Spatially Proximal Markets Coops, Specialty Stores, Restaurants		Spatially Extended Markets Regional Distributors (Expanded)	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	-	Competition (CSA and Farmers Markets) , Inefficiency (Low and Irregular Volume of Sales)	Financial Viability (Sales Volume, Less Competitive), Flexibility and Reliability	-	Financial Viability (Growth Potential, Volume of Sales)	Less Reliable
Substantive	Commitment to Community (Stewardship, Create Jobs, Feed Healthy food, Participate in Local food System)	-	Commitment To Community (Stewardship, Create Jobs, Feed Neighbors, Participate in Local food System, Affordable Food)	-	-	Commitment to Local

Farmer 11: Medium Scale, Beginning Farmer, Middle Age

	Face-to-Face Markets Unstaffed Farm Store, Unstaffed Pick Your Own, CSA (Discontinued), Online Sales		Spatially Proximal Markets Other Farmers Stores		Spatially Extended Markets No Participation	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Low Risk	Inefficient (Farmer's	Efficiency,	Relationships	-	-

	(Unstaffed Farm Store and Pick Your Own) , Market Research (Farmers Market), Customer Education (Product Familiarity), Differentiation (Relationship)	Market: Overdiversification, Time and Energy. CSA:Overdiversifiction)	Convenience, and Transaction Costs (Less Time Per Unit Sold, More Time With Family, More Time on Farm,) Financial Viability (Growth Potential, Volume of Sales)			
Substantive	Customer Interaction, Consumer Education (Teach the Food System)	-	Commitment to Community (Feed my Neighbors)	-	-	-

Farmer 12: Medium Scale, Experienced Farmer, Elder

	Face-to-Face Markets Farmers Market (Reduced), Unstaffed Farm Store, Pick Your Own, CSA		Spatially Proximal Markets Coops, Specialty Stores		Spatially Extended Markets No Participation	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	-	Competition (CSA: Self Competition, Vertical Competition. Farmers Market: Horizontal Competition) Inefficient (Farmers Markets: Bad Markets, Low/Irregular Volume of Sales,	Efficiency, Convenience, Transaction Costs (More Time With Family, More Time on Farm, Wellbeing, Less Time Per Unit), Flexibility and Reliability (Season Planning)	-	-	-

		Time and Energy. CSA: Time and Energy)				
Substantive	Social Interaction (Raise, and Employ others Kids) Commitment to Community (Participate in Local food System) Educate Public (Teach the Food system)	-	Commitment To Community (Feed neighbors, Participate in Local Food System)	-	-	Commitment To Local (Only Sell within 20 mile Radius)

Farmer 13*: Medium Scale, Beginning Farmer, Young

	Face-to-Face Markets Farmers Market (Winter Only), Collaborative Off Farm CSA		Spatially Proximal Markets Coops, Specialty Stores		Spatially Extended Markets No Participation	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Higher Prices	Inefficient (Time and Energy, Summer CSA and Farmers Market: Overdiversification)	Efficiency, Convenience, Transaction Costs (Less Time per Unit, Less Diversity) Predictability and Reliability (Crop Planning, Buy Local Despite Better Prices Distant) , Prices, Flexibility Relationships	Inefficient (Restaurants: Deliveries, Low Irregular Volumes, Search Costs)	-	Lower Margins (Business Model Unsustainable at Those Prices)
Substantive						

Farmer 14: Medium Scale, Experienced Farmer, Elder

	Face-to-Face Markets On Farm Store (Reduced), Farmers Market(Reduced), Pick Your Own(Discontinued)		Spatially Proximal Markets Coops		Spatially Extended Markets Regional Distributors	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	-	Inefficient (On Farm Retail: Too Much Work)	Predictability and Reliability (Crop Planning) Prices, Flexibility and Support	-	-	Lower Margins
Substantive	Commitment To Community (Participate in Local Food Movement, Feed Neighbors, Provide Employment) Community Interaction,	-	Commitment To Community (Participate in Local Food Movement, Feed Neighbors, Provide Employment)	-	-	-

Farmer 15: Large Scale, Experienced Farmer, Middle Age

	Face-to-Face Markets Farmers Market, Farm Store (Expanded)		Spatially Proximal Markets Coops		Spatially Extended Markets Regional Distributors	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	-	Inefficiency (Low/Irregular Volume of Sales. CSA:Overdiversification)	Financial Viability (Volume of Sales) Predictability and Reliability (Crop Planning)	-	Financial Viability (Volume of Sales), Predictability and Reliability (Crop Planning)	Lower Margins (Packaging,)
Substantive	Community	-	Commitment to	-	-	-

	Interaction , Commitment to Community (Foster Community, Affordable Food)		Community (Foster Community, Affordable Food)			

Farmer 16: Small Scale, New Farmer, Young

	Face-to-Face Markets Participation Planned: Farmers Markets (Winter Focus), CSA		Spatially Proximal Markets No Participation Planned		Spatially Extended Markets No Participation Planned	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Growth Opportunity (Winter Markets), Product Differentiation (Relationships)	Competition	-	-	-	-
Substantive	Commitment to Community (Reconnect to Nature, Foster Community, Give Back), Community Interaction, Educate Consumer (Incorporate on Farm Educational Programming)	-	-	Lack of Relationship	-	Lack of Relationship

Farmer 17: Small Scale, New Farmer, Young

	Face-to-Face Markets CSA (Expanded)		Spatially Proximal Markets Restaurants		Spatially Extended Markets No Participation	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation

Formal	Cash Flow, Growth Opportunities (Winter CSA), Stability and Predictability, Community Support	Inefficient (CSA: Overdiversification. Farmers Market: Low or irregular Volume Of Sales, Time and Energy), Competition (CSA; Horizontal)	Financial Viability (Volume of Sales), Marketing and Adverstising	Low Prices	-	-
Substantive	Commitment To Community (Work for CSA Shares, Foster Community, Feed Community, Affordable Food) Educate Community (Incorporate Educational Programming), Social Interaction	-	-	Lack of Relationships	-	-

Farmer 18: Small Scale, New Farmer, Young

	Face-to-Face Markets Unstaffed Farm Stand (Want to Discontinue)		Spatially Proximal Markets Coops, Institution		Spatially Extended Markets Regional Distributor	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Higher Prices	Inefficient (Time and Energy, Low or Irregular Volume of Sales, Waste, Overdiversification), Competition	Financial Viability (Growth Potential, Less Competition), Efficiency, Convenience, Transaction Costs, Relationship	Low Prices	Financial Viability (Growth Potential, Efficiency, Convenience, and Transactions Costs)	Low Prices

			Portability, Feedback and Support, Predictability and Reliability, Marketing and Advertising			
Substantive	-	-	-	-	-	-

Farmer 19: Small Scale, New Farmer, Young

	Face-to-Face Markets Farmers Market, CSA		Spatially Proximal Markets Restaurants, Institution, Coop (Discontinued)		Spatially Extended Markets No Participation	
	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation	Positive Motivation	Negative Motivation
Formal	Higher Prices	-	Financial Viability (Additional Income)	Low Price (Coop)	-	-
Substantive	Social Interaction, Commitment to Community (Sell only Locally)	-	-	-	-	Commitment To Local

Note. The notation on this table is as follows. Farms labelled small have fewer than five acres in production. Medium farms have between five to ten acres in production. Large farms have greater than ten acres in production. With respect to experience, new farmers have between zero and three years of experience, beginning farmers have between four and ten years of experience, and experienced farmers have more than ten years as managers of a particular piece of property. With respect to age, farmers younger than forty are considered young, farmers between 40 and 55 are considered middle, and farmer greater than 55 year of age are considered elder. The * after the farm ID Indicates that participant observation was conducted on a particular farm. It is immediately clear that farmers use both formal and substantive rationality to make decision regarding participation in SFSCs.

Face-to-Face Markets (CSA)

One hundred percent of the farmers interviewed had participated or continue to participate in some form of face-to-face market venue including on and off-farm community supported agriculture strategies (CSA), pick your own operations, farmers markets, and on-farm stores (One farmer was an exception, since she was in her first year of establishing her operation and had yet to sell product, but she intended to sell through a CSA). The degree to which a farm depended on face-to-face market venues was highly variable. Detailed information about the proportion of the farm finances that depended on different market venues was not explicitly collected; however, only two farmers interviewed relied solely on face-to-face market venues as a source of farm income. A diversity of face-to face venues were utilized. One farm participated in all types of the above listed face-to-face venues except for an off-farm CSA, and others participated in only one type, such as a farm store or a CSA.

Positive pressure, formal rationality.

Positive pressure refers to a reason for participating in a market venue that the farmer perceives to be attractive or fulfilling of some goal. The sections below discuss positive pressures motivated by both formal and substantive rationality for participating in face-to-face markets.

There is much overlap in the motivations for participating in diverse face-to-face market exchanges. However, there are some motivations that were particularly unique to CSAs. Nearly sixty percent of interviewed farmers had operated or continued to operate CSA permutations of face-to-face market exchanges. Of these farmers about seventy

percent said that financial advantages were a motivating factor in operating a CSA. Interestingly, the distribution of farmer experience among those who responded in this way was relatively even. Three respondents were categorized as new farmers, one as a beginning farmer, and four as experienced farmers. There were several themes among the types of financial advantages of operating a CSA that farmers described.

Cash flow.

Sixty percent of CSA operating farmers explained that CSAs provided them with up-front cash flow at the beginning of the season (summer and winter). These liquid assets allowed farmers to avoid taking out a loan from the bank to support early season investments and operation costs, or at the very least they served as a financial hedge against season unpredictability.

Community support.

Sixty percent of CSA farmers also reported that CSAs engendered stronger relationships with customers. These relationships were perceived to have many benefits, including customer loyalty, and increased social capital that could be drawn upon to support the farm the in case of some kind of unforeseen farm disaster. This social capital might result in some customer flexibility or forgiveness if an event such as a flood, fire, or health problem decreased the quality or availability of farm's products. In some cases it was reported that CSA customers could be tapped as a resource for donations of money or labor to get the farm through some critical disaster. Several farmers reported benefiting from CSAs in this way or of hearing about others who had. One farmer formalized this

relationship by allowing a certain proportion of CSA shares to be paid through farm labor.

Product differentiation.

The opportunity to build social relationships engendered by the structural organization of face-to-face CSAs was also seen as an advantageous form of product differentiation. Twenty-five percent of CSA farmers were clear that they wanted to provide a service that built social relationships because they enjoyed it, but also they understood that there was a strong market demand for food products that enabled the creation of a relationship or connection to the producer and the site of production. CSAs that brought customers to the farms and preferably the homes of the farmers were thought to do this best. One farmer made this abundantly clear in discussing the success and stability of his CSA.

> Well, on the CSA front, I think the setting here is pretty unique. I can't think of another CSA in the area really that has this kind of setting. You know? The setting here with our house, that is our CSA pickup right there (points out kitchen window), there are people sprawled all over the place. Not like in the house cooking dinner or anything, but it is very integrated into our property, the CSA piece. I think people like that connection. It feels almost like family. (Farmer 9)

One other farmer also expressed the sentiment that CSAs provided the closest connection with consumers, but this fulfilled her substantive goals. These substantive goals will be discussed later.

Stability and predictability.

Nearly forty percent of CSA farmers said that stability and predictability of the CSA made operating a CSA attractive. The guaranteed sale represented by a CSA subscription allowed for accurate crop planning that minimized waste and mitigated the risk of overproduction or market variability. The following quote sums up several of the above positions succinctly.

> We went from raising fifty meat birds for ourselves the first year, to within three years doing 700 meat birds. The demand was just huge, you know? We presold a lot of them, so there wasn't much risk because we knew they were sold. Same with the CSA, you presell stuff so you have guaranteed income. I mean, you have to meet members' expectations, or else you don't get them back but it's easier to start up a business when people pay you up front. (Farmer 4)

Face-to-Face (Including CSAs, Farmers Markets, Farm Stores, Pick Your Own)

Positive pressure, formal rationality.

Authenticity and marketing.

Forty percent of farmers actively participating in a face-to-face market indicated that doing so was crucial to their farm business because these transactions met a consumer demand that could not be delivered in any other way. Several of these farmers indicated numerous negative pressures that have caused them to scale back their face-to-face market venues such as the added time and effort per unit sold that face-to-face markets require, however they noted the necessity of maintaining at least one such venue.

One farmer who is intending to cut back on the farmers markets she attends described their role in this way.

> …I think the customers want to know you as the farmer, what your story is. They will ask questions, and you tell them about what the products are, how they are made, that they are made by me…they like that. Another said 'At a farmers market, your presence, your persona, and personality form this image of the farm, and I think that is really important.' Some consumers respond positively to that. (Farmer 16)

Yet another said,

> …to be really effective at the farmers markets, we feel that one of us, the business owners needs to be there, we can't just always have our staff do it. Its ok once and a while, and I mean, they do a great job, but they do not have the same incentive and the same background, so it is harder for them to push who we are. (Farmer 4)

There are several important conclusions to draw from these statements. First, consumers seek to confirm that a farm fits their desired parameters of authenticity through face-to-face contact and communication with producers. Second, once a farm's reputation of authenticity is established, that authenticity is transferable to other more spatially distant and more financially significant market venues. Thus, face-to-face market venues and particularly farmers markets are perceived as a form of marketing or advertising that establishes a farm's brand and association with the AFS movement. This quote from farmer four makes that link quite clear.

> Now we just do [one farmers market] and we don't do any other ones. I think eventually we will wean ourselves off of that market as well I mean, markets are great for initial exposure and a certain amount of sales, but for us, it is really more the marketing and getting people to know about us, and getting information to the customers. Obviously there is a certain amount of income that comes from the market, but I think we can replace that through other means. What we can't replace is that face time with customers, and meeting new customers…[That is why] we are always really committed to dealing with wholesalers who are committed to promoting local agriculture, and who are willing to write on their signs that say 'This is the farm you are dealing with.' (Farmer 4)

Other farmers describe face-to-face market venues as "a good way to get your name out there" or "get in on the ground floor." These statements also imply that once a reputation is established through face-to-face markets these farmers plan to move on to something they perceive to be better.

Market research.

Several farmers noted that face-to-face transactions provided them with the opportunity to receive feedback from customers which influenced what the farmers grew and sold. This feedback allowed them to refine their product offerings, focusing their production on popular items or in some cases discovering and filling new market niches.

Low risk.

Over twenty percent of farmers actively participating in face-to-face transactions indicated that in early farm development face-to-face market venues were attractive because they seemed to be low risk with respect to entry and operational costs. Several farmers describe first exploiting pre-existing social capital, selling to friends and family, or local farmers markets while they were still learning about agricultural production. Several farmers also indicated that in the early stages of farm evolution, they had or have little time or money to devote to actually selling their product. As a result, they operate unstaffed CSAs, u-pick operations, roadside stands, while viewing farmers markets as a cost free market venue. These views often changed as the farm evolved.

Consumer education.

About fifteen percent of farmers, new and beginning, stated that face-to-face market venues allowed them to influence consumer demand. For example, a farmer could recommend a recipe or offer samples to consumers unfamiliar with a certain product. In a different vein, about twenty percent of farmers also said that face-to-face transactions allowed them to educate consumers about their production practices, which currently or had at some point allowed them to subvert organic certification or other labeling schemes. One farmer in particular reported that upon entering the wholesale market he found that while his CSA and farmers market customers trusted his word regarding his adherence to organic production, his word was not sufficient for attaining a price premium in a wholesale market. He quickly applied for organic certification.

Higher prices.

About twenty percent of farmers participating in face-to-face markets report that a positive motivation for doing so, particularly for farmers markets and farm stands, is the higher prices that they receive for their products (CSA products are often discounted). However, higher prices do not necessarily translate into more income. There seem to be good markets and bad markets in terms of both customer volume and market management: "We do really well there [specific market]. We have seniority, we have a good spot. What really distinguishes that market for us is that they keep a balance so that we are not flooded with vegetable growers" (Farmer 12).

Thus, the prospect of higher prices, or a greater proportion of the food dollar must be couched within the potential for the volume of sales. One new farmer produces only wholesale crops in part because he cannot get into a good farmers market. "If I was in [a good market] and I could get ten dollars a pound for my salad mix, then that would be much different than getting five dollars a pound [around here]" (Farmer 3). Negative pressure for not participating in face-to-face markets will be discussed in detail below.

Growth opportunities.

About twenty five percent of farmers, some from each experience category, are currently investing or intend to invest significant amounts of money into infrastructure and equipment which will allow them to operate winter CSAs and farmers markets. There is a perception that there is a potential for growth in the winter markets. Most farmers described significant competition for summer farmers markets and CSAs, which will be discussed in further detail below.

Positive pressure, substantive rationality

Consumer education.

About thirty percent of farmers participating in face-to-face market venues said that they personally wanted to teach customers about where food comes from, the different ways it can be grown, environmental processes and impacts of production, and what it takes to grow food in terms of effort and commitment. This is differentiated from a formally rational desire to supply a consumer demand to reconnect with food production in that these farmers frame it as a personal mission or even as a form of community service to educate consumers. In several cases this goal has motivated farmers to continue offering an on farm CSA, even though their farms had transitioned or were in the process of transitioning to different markets. One experienced farmer said this of their on-farm CSA.

> We have always wanted to have an on-farm pick-up component. We do deliver shares now, and I have kind of resisted it, and I really don't like it, but it is sort of a part of the market. But I always, always want this on-farm pickup component, and I always feel like the people who come to the farm and pick up their shares just get so much more out of the program. They have the opportunity to come pick in the gardens, or even just talk to us, and see a field. They don't even have to go out there if they don't want to. But I think it is important and I want to offer that. I want people to say, 'I know where this food comes from. I know how it grows. I can see it as well as eat it and experience it.' (Farmer 4)

Other farmers expressed similar opinions, such as feeling it was necessary to teach children that food did not "come from Hannafords" (Farmer 11), or even employing neighborhood children—though perhaps they were not the best workers—so that they would be exposed to the realities of food production (Farmer 12). Two new farmers hope to incorporate on-farm educational programming as part of the social mission and business model of their farm. These educational enterprises were framed as a way to give back to the community and society by increasing food systems and ecological awareness.

Commitment to community.

Over fifty percent of farmers participating in face-to-face markets made some mention of wanting to support or strengthen their local community. The nature of this support varied from farmer to farmer, but there were some common themes.

One of the more obvious themes is that some farmers want to feed their communities high quality, fresh, and healthy food. Several are committed to selling their food locally in pursuit of this goal and refuse to extend their sales beyond an arbitrary local scale. In one case, a farmer is actually expanding production and spatially extending his sales chains in part so that he can achieve economies of scale and make his products more affordable to local families (Farmer 10). Another farmer described that even though she operates a farm stand that is very convenient and is aware of more lucrative farmers markets, she commits to participating in her local farmers market because "this is the town that we grow in so we are going to sell at [this market]" (Farmer 8).

Another theme is that some farmers want to foster social interaction which is primarily achieved through operating an on-farm CSA. These farmers operate their CSAs

such that their farms become centers of community interaction and activity. The farmers seem to get a degree of satisfaction from providing this service, but they also enjoy forming these relationships themselves. Several farmers said they derived significant satisfaction from families returning to their farms year after year. Three farmers described that they enjoyed feeling as if they were contributing to raising the children of other families by employing them, giving them a place to be, and teaching them life lessons. Another farmer described the satisfaction he derived from generating almost family-like bonds between him and his CSA members. One farmer described her desire to build community in this way.

> We want people to feel comfortable coming and stopping and chatting, and asking what is good today, what do you recommend? You know? It's a sense of community and we want to be a part of it. Without [the community] we don't have any [success]. We need our neighbors to support us, and they do. (Farmer 8)

This is just one example of the apparently contradictory quality of many farmer motivations. In this case the farmer states that she appreciates and seeks to participate in community seemingly motivated by substantive rationality, but also acknowledges the fact that the financial success of her farm is intimately tied to the existence and quality of these connections, giving her actions a formally rational tint. Rather than question the veracity of her position, one should conclude that in this case both forms of rationality are motivating this SFSC farmer to foster community relationship building.

Customer interaction.

Not unrelated to a desire to foster community interaction as described above, about thirty percent of farmers indicated that they enjoyed interacting, communicating, and building personal social relationships with their customers. The creation of the relationships is directly enabled by the face-to-face interactions generated by their CSAs, pick-your-own operations, roadside stands, and farmers market presence. They find these interactions "sustaining." One farmer found that when she was working on someone else's farm, mainly to supply spatially proximal wholesale markets, she missed consumer interaction so much that she was motivated to start her own CSA-centered farm (Farmer 6).

Negative pressure, formal rationality.

Competition.

Nearly forty percent of farmers currently or formerly participating in face-to-face market transactions indicated that a negative pressure against participating in face-to-face market venues was a perception that they were becoming very competitive markets. There were three types of competition discussed.

The most discussed form of competition was competition with farms of a similar scale offering similar products, here referred to as horizontal competition. Competition for CSA members, farmers market customers, and even pick-your-own customers was discussed. The perception among these farmers, both new and experienced is that there has been an explosion in growth of producers in these markets but not a concomitant increase in consumer demand. As discussed above, some new farmers are forgoing face-

to-face markets altogether because of this competition, and some experienced farmers have cut back or eliminated CSA programs and farmers market attendance.

The second most discussed form of competition, is competition with producers that are either of a larger or smaller scale than the interviewed farmer. Two farmers discussed how small scale hobby farmers were damaging their businesses. First, these hobby farmers do not necessarily need to make a profit and thus may undercut commercially oriented farmers at farmers markets and even cut into the number of consumers purchasing from retail venues. In addition, since the hobby farmers were not producing at commercially significant scales, the interviewed farmers believed that they did not have many of the same costs that they did running larger operations. Some of these costs included the cost of organic certification, the cost of using a certified animal slaughtering facility (which is only required at larger scales), and various forms of insurance. Other farmers mentioned the challenges posed by larger farms that were filling the face-to-face market niche. These farms were seen to have economies of scale that gave them a competitive advantage. Several farmers made veiled remarks that these larger farms were potentially betraying the spirit of alternative food systems by adopting some characteristics of the CFS such as migrant labor, wide distribution networks, larger scales, and overt competitiveness.

The third type of competition discussed was competition with oneself, which was specifically in reference to CSAs. Two farmers noted that operating a CSA may reduce the number of loyal customers that come to farmer's market venues. This is

significant in that CSAs often sell produce at a discount compared to farmers market prices.

Inefficiency.

Over seventy percent of farmers formerly or currently participating in face-to-face markets discussed some form of inefficiency as a significant negative pressure of face-to-face market venues.

One of the most common forms of inefficiency discussed was that consumer expectations in CSA and farmers market venues required farmers to grow too many different kinds of products. These farmers understood over-diversification to negatively impact the financial wellbeing of their farm and in some cases their personal physical and emotional wellbeing. In some cases, farmers noted being overextended during the season, not being able to keep up with the physical demands of managing many different products with different requirements. Several farmers noted that too much crop diversity impeded their ability to collect data for and analyze crop enterprise budgets, or caused them to "lose track of too much stuff" (Farmer 1), and they found this financial blind spot discomforting. Others noted that they were forced to grow crops that their land was not necessarily suited for or they were not capable of growing well because their customers expect to have a diversity of products available in face-to-face markets. One farmer noted that he participates in winter farmers markets because a low diversity of crops is acceptable which aligns with his high prioritization of farm efficiency (Farmer 13).

Another common type of inefficiency discussed was the potential for a low volume or irregular volume of sales through face-to-face markets, particularly farmer's

markets. Farmers who had these complaints often contrasted the variability of these markets with the relative predictability of wholesale accounts. Some farmers mentioned how they have to guess how much they are going to sell at a market, and if they are wrong, they either miss out on potential sales because they did not bring enough, or they waste produce because they brought too much. This happened to new, beginning, and experienced farmers. Nearly all of the experienced farmers participating in farmers markets noted negative historic trends in farmers markets. One trend was that there are many new farmers markets, which made each market less lucrative. Another trend was that farmers markets were perceived to be transitioning in terms of their character from a place to buy groceries to a place to buy snack foods and specialty items. Two produce farmers believed this was negatively impacting sales in formerly reliable markets. A final trend that several farmers mentioned was that there are good markets and bad markets. Good markets have many customers and are managed so that there are not too many overlapping types of vendors. When the inverse is the case, farmers report losing money attending farmers markets, and they often drop out. When they do drop out, these farmers say there is always some other farmer eager to replace them, only to drop out later on. They see these farmers markets as great for consumers, but not for farmers.

Many farmers also find farmers markets to be a considerable investment of time and energy. Farmers reported concerns about the cost effectiveness of these markets when compared to the additional effort required to staff these market venues, not just in terms of wages, but also work left undone on the farm, to package or present foods in an

attractive way, and to maintain an attractive and safe farm environment. The negative pressures are not always related to cost effectiveness.

Two farmers noted that they would like to spend more time with their children, and farmers markets take away much of that time. In both of these cases, investment in farmers markets was reduced and an increased effort was put into pursuing sales to spatially proximal wholesale accounts. Other farmers have found farmers markets to be physically and emotionally exhausting, not just because of the long hours involved, but the effort involved in developing and responding to social relationships with customers, which is integral to the authenticity of that market experience.

Lack of growth potential.

Several farmers noted that when they focused on local sales through face-to-face markets, there were obstacles to growth. These obstacles included a stagnant consumer base and no available time to take on additional markets or participate in more distant markets. That said, there are farmers who have successfully implemented creative face-to-face schemes to expand sales in these markets. Many farmers mentioned Pete's Greens as an example of such a farm.

Negative pressure, substantive rationality.

There were no negative pressures motivated by substantive rationality detected for face-to-face markets.

Table 2

Summary of Face-to-Face Market Motivations

	Formal Rationality	Substantive Rationality
Positive motivation	Cash Flow (CSA) Community Support (CSA)	Consumer Education Commitment to

		Community
	Product Differentiation (CSA)	Customer Interaction
	Stability and Predictability (CSA)	Commitment to Local
	Consumer Education	
	Higher Prices	
	Growth Opportunities	
Negative Motivation		
	Competition	None
	Inefficiency	
	Lack of Growth Potential	

Note. Table shows thematic codes for positive and negative motivations for participating in face-to-face SFSC transactions. Both formal and substantive rationality play a role.

Spatially Proximal Market Avenues

Almost eighty percent of farmers interviewed participated in some kind of spatially proximal market venue. These market avenues involve a somewhat longer supply chain, with a farmer's product being sold through a local middleman. These avenues were generally referred to by the farmers as wholesale accounts, meaning that buyers purchased farm products at a reduced price as compared to face-to-face transactions, because the wholesale buyers are assuming the responsibility of retailing the product to consumers. The middlemen in this study were quite diverse. Reported local middlemen included other farmers' farm stands and CSAs, local country stores, supermarkets, specialty markets, co-operative grocery stores, institutions such as retirement homes, hospitals, or schools and universities, and restaurants.

Positive pressure, formal rationality

Financial viability.

About seventy percent of farmers participating in spatially proximal markets said that a positive motivation for doing so was that they perceived these markets held the greatest opportunities for, or were a necessary part of, generating sufficient revenue to meet their farms' financial goals. There were, however, many variations on this theme.

Twenty percent of farmers participating in spatially proximal markets perceived them to be less competitive than face-to-face market venues. Both experienced and new farmers shared this perception. One farm couple that had been farming locally for over a decade described their initial motivation to take up wholesale market venues this way,

> We started looking at trying to do something at the wholesale level because of this market pressure, especially [from] small direct to consumer farms….when we first got started doing all of this stuff, there were not that many farms doing it, and we had no problems selling everything we had to sell, and it was really....the harder part was producing. Now we feel much more comfortable with producing, and it is harder to sell because there are so many other farmers, especially on the [face-to-face] side. (Farmer 10)

A new farming couple that had only been farming for one season organized their farm operation around primarily wholesale accounts because, as they said, "There are lots of people talking about saturation [in face-to-face markets] and we have kind of sidestepped that by wholesaling" (Farmer 18).

Another variation on this theme shared by all of these spatially proximal farmers is that wholesale accounts are a way to increase volume of sales beyond what can be sold

through face-to-face markets. Though many note an initial hesitation in participating in wholesale due to lack of confidence, perception of a negative stigma, or the reality of lower market prices, these farmers found that wholesaling helped increase their gross revenue as compared to often stagnating face-to-face markets. The following quote outlines some of the tensions and opportunities present in wholesaling.

> I think our long-term goals would be that we really enjoy and like the retail side of it, so growing our farm stand, growing for [farmers] markets. That is what we love to do, but the money we get [from] wholesaling pays off all of our projects. (Farmer 15)

One experienced farmer had operated a CSA-only farm for a number of years. He continues to feel that the CSA is the heart and soul of his operation, but the CSA seemed to hit a "natural ceiling" of members that did not generate sufficient income, and thus he is enthusiastically growing his wholesale markets.

> The wholesale farm that I started out at, it was factory production, and that has become more of a reality for us now … if you and I would have talked about five years ago I would have said 'No way! That is not going to happen, not interested.' But boy, the market is wide open on those things that I am pretty good at doing, might as well do it, the door is open … I don't have a problem selling to a supermarket, at that point it just wasn't the sort of idealistic vision that I had. (Farmer 9)

While some farmers seem to choose to grow into spatially proximal markets, others successfully participate in wholesale markets at very small and consistent scales. One

farm participating primarily in wholesale accounts had only three quarters of an acre in production. Though he didn't produce huge volumes of food, he could focus his production on a narrow diversity of crops which would not be well received in face-to-face markets (Farmer 3). It is clear that the financial advantages that attract farmers to spatially proximal markets extend beyond the potential for higher volumes of sales, but also the cost of making a sale.

Efficiency, convenience, and transaction costs.

About thirty five percent of farmers participating in spatially proximal markets made some mention about the ease of participating in spatially proximal markets as compared to face-to-face market sales. This variable is closely intertwined with the financial variables described above. This is because face-to-face markets take a considerable investment of time and effort per unit sold. Generally, however, spatially proximal sales are merely packaged and delivered, rather than being sold at staffed markets. Reported benefits of reducing the amount of time and effort spent selling products at face-to-face markets and replacing those markets with spatially proximal sales include spending more time doing economically productive work on the farm, keeping the number of employees down or even at zero, having leisure time or more time to spend with family, and better physical and emotional wellbeing. This beginning farmer summed up her perception of wholesale in this way.

> I still like doing the farmers markets, so I wouldn't want to give them all up, but four in a row, by the end of the season you are kind of worn out. You know? Constantly gogogo. If I could keep the bigger ones, the more

> profitable ones, and then [wholesale]. … So for [wholesale] I just spend the time to pick for them and then I drop it off and get this much money. … Granted, I don't get the same amount, but I am selling more, and I don't have to be there to sell them. (Farmer 11)

Predictability and reliability.

Much like the CSA, fifty percent of farmers participating in spatially proximal wholesale markets are quick to point out that they are predictable and reliable. However, this predictability is not inherent to the organization of these supply chains as it is in a CSA. Predictability and reliability of sales occurs because of significant efforts on behalf of certain wholesale buyers to make them that way. There are two major ways that this study identified that reliability and predictability are achieved.

The first is through a social relationship with the wholesale buyer, be they a restaurant owner, another farmer running a farm stand, or even a produce buyer at a grocery store or coop. One farmer explained that her sales to a particular wholesaler were reliable because "our kids went to school together, so they want to support the local guy" (Farmer 11). Another said, "They come to me first because of local loyalty and support" (Farmer 8). This seems to support the belief that social embeddedness plays a role in spatially proximal SFSC transactions. This support seems to flow both ways in these relationships. One farmer told me that he makes an effort to supply to a local country store because he knows them, even though he believes that doing so is not economically worth his time (Farmer 13).

The second reason that farmers achieve predictability and reliability in spatially proximal wholesale sales is because several larger wholesale buyers meet with farmers who supply them and tell them which crops to grow and how much they expect to buy. These expectations are not contractual in either direction, but it does not seem to be necessary to legally enforce these expectations. One farmer who sells primarily to these kinds of wholesale accounts described them this way: "My wholesale accounts are just so easy. I try to hold up my end of the bargain, and they just always hold up their end of the bargain" (Farmer 13). Since these arrangements are reliable they allow for farmers to do accurate crop planning, business planning, apply for loans, minimize waste, and streamline their operations. Since his local coop lets him know what they intend to buy in the winter, this farmer has refined his operation so that he expends little wasted effort: "I am selling pretty much everything I can grow. I mean, I don't grow stuff I don't have a market for" (Farmer 14). Despite making these plans whoever, it seems that both wholesale buyers and farmers are willing to be quite flexible when it comes to changes in market prices or product availability.

Flexibility.

Nearly thirty percent of farmers participating in spatially proximal wholesale supply chains mentioned that the larger wholesale accounts, while also being very reliable, were also very flexible. When asked what the consequences were of failing to meet a wholesaler's expectations, one experienced farmer said, "People are pretty forgiving. We are not on starvation basis [in this country]. We are a national food system. You can buy anything you want from anywhere, probably cheaper than you could buy it

locally" (Farmer 14). This quote has two very interesting implications. First, commitments to buying local food founded in substantive rationality can persist in wholesale value chains despite formally rational incentives to purchase cheaper products from elsewhere. Second, the CFS is actually an integral part to the success of SFSCs, in that the CFS can be asked to instantaneously fill gaps caused by inevitably variable supply from a relatively smaller number of local producers. Consistent supply keeps wholesale buyers financially healthy which allows them to continue buying from local producers in the future. This mutual interdependency is also reflected in flexibility with respect to product pricing.

About twenty percent of these farmers indicated that they and their local wholesale buyers are flexible with respect to product pricing. One farmer noted that if he believed that his product was not of the quality expected, he might offer it to a local wholesaler at half price. This suggests an effort to maintain consistent and open communication and negotiation in order to maintain a positive working relationship. Another farmer said that local wholesale accounts will regularly negotiate prices, sometimes down, but will also offer prices that are higher than the price the farmer asked for.

> They ask me what I have. I tell them what I have. They ask what the price is. I tell them the price. Sometimes they ask 'Can we get it down to X?', and sometime they say, 'Actually, we can give you Y.' (Farmer 13)

This flexibility suggests that a positive social relationship seems to play a significant role in spatially proximal wholesale markets.

Marketing and advertising.

About twenty percent of farmers selling through spatially proximal wholesale markets explicitly mentioned that they seek out local wholesalers because of the type and quality and type of marketing that they offer. There are two distinct ways observed in these interviews that farmers seek to exploit marketing services from local wholesaler buyers. First, some farmers seek out wholesale buyers that will advertise the farm itself, bringing its name and story to a wider audience. These farms generally have a reputation of authenticity established through participation in face-to-face markets. These farmers want to market their existing brand to a wider audience by outsourcing the marketing and retailing of their product to local wholesale buyers. These buyers may label which farms products are coming from with signs on produce displays or coolers, or they may have photographs or printed materials with information regarding farmer identities.

Then there are farmers whose brands are not well established. They may be new, or they may not wish to participate in face-to-face markets. Rather than capitalize on their own brand, these farmers exploit the brand and labor of the wholesale buyer to move product in a way that resembles CFS supply chains. Consumers may not know who these farmers are, even if their names are advertised, instead trusting the food's authentic identity to the wholesale buyer's judgement and reputation. One farmer described it this way.

> Being able to market your product when you have no time to do it is a challenge. You are assuming that everybody needs to eat, so they are going to buy cucumbers from you [at a roadside stand and farmers

> market], but that is not necessarily the case. So, when we first moved here we tried to find a few wholesale accounts just to move stuff, because you are not really established and people don't know who you are. (Farmer 8)

While the wholesaler could help the farmer establish a reputation, they also allow for an almost anonymous commodity type purchasing relationship while that authenticity is being established.

Some wholesale buyers also provide a platform for producers to advertise their goods or do consumer education. Examples include allowing producers to sample products in the store or post farm and product information on their websites.

Feedback and support.

About thirty percent of farmers found local wholesale to be much less intimidating and restrictive than they had thought it would be. This apprehension of entering the wholesale market seems to stem from a misperception that local wholesale buyers are more aligned with the impersonal, competitive CFS, than the supposedly more cooperative and socially embedded AFS. The perception that wholesalers operate under a different paradigm causes some farmers to assume that local wholesale markets come with a completely foreign set of values, expectations, and practices. They are pleasantly surprised when this turns out not to be the case.

For example, several farmers reported being surprised at how approachable local wholesale buyers were and how eager they were to take on new accounts. One farmer reported this about her initial apprehensions of getting into the wholesale market.

> Wholesale feels like you are competing on a level with the big boys, a local institution can buy all of their stuff from Black River Produce, and Black River is like a big business that is very professional, and they have a lot of experience, how to speak to buyers, how to communicate with them. At the beginning I think I felt like I didn't even know how to write an email to a wholesaler. … I wanted to communicate on the same level. In general though, we found out that after you get past that terrifying first step of making contact, people are very nice, and generally they are professional, but not uptight. They communicate like people. (Farmer 18)

Second, certain buyers, retailers, and restaurants are very willing to deal with small amounts of product if the farmer delivers it. Several farmers reported that they assumed a wholesale buyer would not be interested in purchasing from them because they did not have a big farm or make a lot of product. These assumptions turned out to be incorrect.

Third, because of the sourcing flexibility described above, farmers are not contractually or even socially obligated to provision a product. This is an unexpected quality of these markets that is appealing to farmers just getting into wholesale, and reduces their anxiety while they learn how to navigate these new markets.

Finally, wholesale buyers were reported to give helpful feedback to producers. Feedback included recommendations on bunch sizing and product presentation, as well as information relayed from customers about new market demands. This feedback is like the direct feedback from customers that can be experienced at the farmers market or CSA,

however it is relayed and interpreted through a more experienced party. This is useful for new farmers as well as experienced farmers in that wholesale buyers and retailers can do a lot of market analysis and use that analysis to streamline farm production as described above.

Relationship portability.

One new farm couple mentioned that the portability of local wholesale account relationships was a positive motivation for participating in them (Farmer 18). These farmers were renting land and were not sure how long they would be able to stay on that property. Whereas effort put into building a face-to-face market following might be wasted if these farmers were to move, effort put into developing good working relationships with wholesale buyers were perceived to be more mobile.

Price.

Nearly fifteen percent of farmers said that a positive motivation for participating in spatially proximal wholesale markets was that they offered higher prices than spatially extended wholesale markets, sometimes as by as much as a third. Spatially extended wholesale buyers most often discussed by farmers included Deep Root Cooperative and Black River Produce.

Positive pressure, substantive rationality.

Relationships.

About forty percent of farmers participating in spatially proximal wholesale markets mentioned that they were surprised to find that they still felt as if these economic exchanges were embedded in a social relationship. Farmers relayed stories of how social

relationships between themselves and produce buyers influenced economic activities on both sides, and for some farmers these relationships fulfilled their need for social interaction. Even for these farmers, however, they noted that the number of relationships formed was much lower than it would have been through face-to-face markets. For some farmers, these relationships were not sufficient to meet their substantive goals.

Negative pressure, formal rationality (restaurants, institutions)

Not all spatially proximal wholesale markets are perceived to be equal. About forty percent of farmers participating in spatially proximal wholesale markets sold some products to restaurants and institutions. Of these farmers, sixty percent had concerns regarding restaurant sales.

Inefficiency.

A common concern among these farmers was that sales to restaurant were inefficient. The volume purchased at a particular sale was reported to be often quite small and the demand inconsistent. Inconsistent demand was reported to make it hard to do crop planning that minimized risk and waste. Resorting to calling up restaurants and finding one to purchase extra product when it was available was perceived by one farmer to be a significant additional cost. The inefficiency of these sales is compounded because farmers are often expected to also deliver the purchased product. One beginning farmer described her twice a week restaurant delivery this way: "… we self-distribute, so I have it all in my Dodge van, and I run around like crazy twice a week. It is not the most efficient system, so I am starting to rethink it" (Farmer 1). Another farmer who does not

sell to restaurants but instead sells most of his products to coops and specialty stores described his avoidance of restaurant opportunities in this way.

> I sell almost all of my stuff to six customers, and the idea of making calls to restaurants for forty dollars of sales is just not where I want to be in the summer. … Some people love driving around and chatting with chefs, and they spend like six hours on a Tuesday driving. … I can't be away from the farm for that long. (Farmer 13)

Low prices.

The prices in these markets were also said to be low, especially in the case of public schools. Several farmers suggested that school, restaurant, and institutional pricing was low and demand unreliable because the farmers were in direct competition with regional and national distributors whose prices were lower and whose streamlined logistics lowered transaction costs. When these schools, restaurants, and institutions did want to purchase items, they often were not in large enough quantities to make sales worthwhile. One farmer who regularly engages with these markets was frustrated with them for these very reasons.

> There is a school in our village, they want to buy potatoes, and we grow potatoes, we grow 12 acres of potatoes, so we are large potato growers. We get a buck a pound wholesale, some places I get a buck and a quarter wholesale. They [the school] want to pay ten cents … which is what they can buy non-organic potatoes for. … We have even offered places matching pricing, and they still don't really want to buy enough. You

> know, it is so easy for them to buy from Sysco, Burlington Foods. They make one phone call and they have everything they want. … One of our restaurants, they can't afford to buy lettuce from us because if they buy so many cases of lettuce they start getting a kickback. … I think that that is part of it also. Time factors for these institutions and restaurants. Their time is making food. (Farmer 2)

Ready to eat.

One concern expressed by thirty percent of farmers selling to restaurants and institutions is that these buyers sometimes expect the foods they purchase to be washed or processed in such a way that they are ready to eat. While these farmers see this as an added cost and a negative motivation to participate in these markets, one interviewed farmer perceived these requirements to be a market opportunity (Farmer 9). He was in negotiations to sell large quantities of his products to a nearby hospital. If the market proved stable, he planned to invest in equipment that would allow him to process his vegetables into ready-to-eat products and grow into the institutional market.

Spatially Proximal Wholesale (Retail)

Negative pressure, formal rationality.

Financial viability.

Many farmers report initially being dubious of wholesale markets before they seriously engaged in them. The most common assumption was that the markets would not make financial sense because the farm did not produce enough food, that the prices

offered were too low, or that they could get more money through face-to-face accounts. These assumptions were challenged in several ways.

First, some farmers reported participating in one of a variety of farmer training programs offered through UVM extension or NOFA. These experiences encouraged farmers to be aware of and keep records of the costs of participating in face-to-face markets. For these farmers, many noted that they had assumed that participating in face-to-face markets was free. However, after participating in these programs they were aware of the opportunity costs of being away from the farm for so long to retail products themselves. Awareness of these costs motivated them to adopt or increase participation in wholesale accounts.

Second, some spatially proximal wholesale buyers were reported to be very willing to deal with relatively small amounts of product, give new farmers a chance, and paid consistently fair prices.

Negative pressure, substantive rationality.

While some farmers felt their substantive goals were being met through participation in spatially proximal wholesale markets, three farmers felt that these market venues did not provide sufficient interaction with customers or result in sufficiently strong customer relationships to satisfy their substantive goals. This is in contrast to eight farmers who participate in spatially proximal wholesale markets to varying degrees, who do not necessarily seek large amounts of social interaction, but view spatially proximal wholesale accounts as a way of meeting substantive goals of participating in a local food

movement, or strengthening their communities by supplying their neighbors with healthy, affordable, and accessible food.

Table 3

Summary Table of Spatially Proximal Market Motivations

	Formal Rationality	Substantive Rationality
Positive motivation		
	Financial Viability	Relationships
	Efficiency and Convenience	Commitment to Local
	Predictability, Reliability	Commitment to Community
	Flexibility	
	Marketing and Advertising	
	Feedback and Support	
	Relationship Portability	
	Higher Price than Sp. Extnd.	
Negative Motivation		
	Inefficiency (Restaurants)	Lack of Relationships
	Lower Prices (Restaurants)	
	Ready to eat (Restaurants)	
	Lower Price than FtF	

Note. Table shows thematic codes for positive and negative motivations for participating in spatially proximal SFSC transactions. There are both formally and substantively informed motivations for participating in these markets, but formally rational motivations play a more significant role than in face-to-face transactions.

Spatially Extended Markets

In this study spatially extended markets consisted of regional distributors who directly interacted with farmers but then sold the product to retailers who interacted with customers. While some of the retailers operated within the study area, others were in nearby and distant states. One farmer noted that some of his products travelled to a retailer in Florida. Almost forty percent of interviewed farmers reported participating in

spatially extended markets. Of these forty percent, over seventy percent were experienced farmers, and the rest were new farmers. Sixty percent of experienced farmers interviewed in the study reported participating in spatially extended markets, zero percent of beginning farmers, and thirty percent of new farmers participated in spatially extended markets.

Positive pressure, formal rationality.

Many of the positive pressures informed by formal rationality to participate in these spatially extended markets resemble those of spatially proximal markets. These markets allow for season planning, high volume of sales, have growth potential, and are seen as time-efficient, in part because several regional distributors go to the farm to pick up orders. However, they should not be viewed as simply larger versions of spatially proximal markets for reasons which will be discussed under negative pressures.

Positive pressure, substantive rationality.

No positive pressures informed by substantive rationality were recorded for spatially extended markets. This seems to support the idea outlined by the SFSC framework that the significance of social embeddedness diminishes with increased social and spatial distance.

Negative pressure, formal rationality.

Lower margins.

About forty percent of farmers participating in spatially extended markets noted that a significant negative pressure for not participating in these markets was that they paid less than most spatially proximal wholesale accounts. One farmer said that the prices

were between a third to half as much less than he could get selling to spatially proximal wholesale buyers (Farmer 2). Nearly thirty percent of farmers said that there were significant added costs of participating in these markets as compared to spatially proximal markets, which rendered them less desirable. Some of these costs came from commissions, shipping charges, and extra packaging. For these reasons several farmers said that spatially extended markets were a market of last resort.

Less reliable.

Spatially extended markets were also perceived by nearly thirty percent of farmers to be less reliable than spatially proximal markets. While regional distributors made an effort to anticipate demand and help farmers crop plan, several farmers noted that these plans were by no means a guarantee. In addition, several farmers noted that though the development of a good working relationship with produce buyers at regional distributors was important, it also was not a guarantee of favorable treatment. One farmer mentioned that some regional distributors play local producers against each other in order to lower prices. Another mentioned that sometimes there was demand for his product and other times not (Farmer 2). He perceived that there was a hierarchy of producers and that he was not at the top. In fact, Farmer 2 perceived two other farmers in this study to be at the top, and these two farmers said they had no troubling selling all they could produce and were very happy with their spatially extended market venues (Farmers 5, 15). These top-tier farmers had the largest produce farms in the sample with more than 40 acres in production at a time.

Scale appropriateness.

Farm scale was perceived to be an obstacle to successfully participating in these markets. Farmers believed that these regional distributors only want to deal with large quantities of goods. One new farmer, who operated a very small farm, attributed his ability to sell to a particular regional distributor because of the existence of a strong social relationship with the sales manager there.

> I am probably more of a hassle to [the regional distributor] than anything else, but I have a good relationship with the sales manager, and all the growers know me. It is not like I'm hurting them, but they are used to dealing with pallet quantities, and I don't provide that. (Farmer 3)

This suspicion is reflected in the fact that the average size of farms participating in spatially extended markets, based on reported estimated acreage in use, was about two times the average size of farms in the whole study.

Price competition

Forty percent of farmers reported a trend in spatially extended markets that was not mentioned in the context of other markets: the necessity of keeping prices for products below that of competitors. Regional distributors were reported to encourage this kind of competition, passing over regular suppliers if another offered a product at a lower price. In face-to-face markets, discussions about competition never mentioned price but rather competition over access to venues where there were sufficient customers to ensure a sufficient and consistent demand. However, in spatially proximal markets where SFSC farmers were in competition with regional distributors, such as restaurants and institutions, several farmers mentioned that price was often an issue.

Negative pressure, substantive rationality.

Commitment to local.

Twenty percent of all farmers in the study had expressed negative pressures against spatially extended markets that were informed by substantive rationality. For two of these farms a commitment to local sales tempered market pressure to participate in spatially extended markets (Farmers 4, 12). This was despite the fact that both of these farmers perceived there to be a demand for their products in cities up and down the eastern seaboard. Two different farmers also felt that they would prefer to sell more of their product locally but that a need to generate revenue to support their farm business was forcing them to sell their products in spatially extended markets (Farmers 3, 10). These farmers hoped that once their finances worked out they might be able focus on spatially proximal and face-to face sales.

Lack of relationships.

Another farmer did not like selling to regional distributors because of a perceived lack of opportunities to build social relationships. She said, "You don't get to see or interact with your customers. The truck pulls up and your things are gone" (Farmer 7).

Table 4

Summary Table of Spatially Extended Market Motivations

	Formal Rationality	Substantive Rationality
Positive motivation		
	Financial Viability Efficiency and Convenience Predictability, Flexibility	None

Negative Motivation		
	Lower Margins	Commitment to local
	Less Reliable than S.Prox.	Lack of Relationships
	Scale Appropriateness	
	Price Competition	

Note. Table shows thematic codes for positive and negative motivations for participating in spatially extended SFSC market transactions. While spatially extended markets share many formally rational positive motivations with spatially proximal markets, spatially extended markets have substantively informed negative motivations. These negative motivations link to the two core goals of SFSC structures, spatially and social proximity. This suggests that that spatially extended supply chains are perceived by some to undermine SFSC values systems.

Conclusions and Recommendations

It is clear that the goals and motivations that farmers have for participating in SFSCs are informed by both formal and substantive rationality. These findings corroborate an expanding body of literature that challenges the idea that the AFS and the CFS are fundamentally differentiated on the basis of an economic paradigm that confers greater power to substantive rationality. Rather as this study shows, the structure of SFSCs enables but does not require substantive goals to be valued and supported. The relative importance of substantive goals seems to be both a function of personal values as well as a response to numerous external factors unique to each farmer's situation. In addition, the variable importance of substantive goals within SFSC markets has important implications for how these markets may develop.

The concomitant role of formal and substantive rationality in SFSCs is best described as inversely proportional across the three market types. In face-to-face markets many farmers note positive substantive motivations, in spatially proximal markets substantive motivations are both positive and negative, and in spatially extended markets only negative substantive motivations were mentioned. Positive formal motivations that

relate to business efficiency, such as lower transaction costs and high sales volumes are the prerogative of spatially proximal and extended markets, while many farmers complain about the relative financial inefficiency of face-to-face markets. This general trend across the market types is significant in that it suggests that spatial and social proximity are necessary for farmers to meet substantive goals and deliver the products they perceive like-minded consumers to demand. In addition, more spatially extended markets are better able to fulfill formal goals. While this is the general trend across the three market types, there were patterns amongst farmers that question the permanence of this trend.

There are two interrelated trends among farmers that hold implications for valuation of substantive rationality in SFSC production and exchange. First, farmer valuation of substantive and formal rationality begins as matter of personal preference unique to the farmer's background. Some farmers begin farming in SFSCs already heavily favoring formal rationality, while others begin favoring substantive rationality or a mix of the two. Second, the farmer's valuation of formal and substantive rationality can change in response to a number of factors such as market opportunities, competition, market feedback, acquisition of new skills and knowledge, evolving definitions of authenticity, a desire to spend more time with family, the interests of the next generation to inherit the farm, the declining energy or health as a consequence of age, and more. One example that cut across many interviews was farmer response to increasing competition in face-to-face markets.

Many farmers indicated that face-to-face market venues were becoming more competitive. The management responses to this knowledge differ in part according to how much each farmer favors formal or substantive rationality. For farmers who favor formal rationality, such as farmers 1, 5, 13, or 18, the decision to eliminate or not even initiate participation in these markets and replace it with more socially and spatially extended markets seems easy. For farmers who expressed substantive goals that are affiliated with the values of SFSCs as a social movement, such as Farmers 3, 4, 10, 12, and 14, the decision of how to respond to increased competition in face-to-face markets was more complicated. For farmers who face financial stress, such as Farmers 3 and 10, they are keenly aware that they are compromising their substantive goals to be able to maintain the financial viability of the farm. They must participate in spatially extended markets that undermine their substantive goals and they are not happy doing so. For other farmers such as 4, 12, and 14, for whom financial troubles do not seem to be dire and substantive goals play a significant role in farm decision making, they seem willing to absorb the financial costs of meeting their substantive goals. In this study this was observed through the commitment to continue participating in less profitable markets and avoiding participation in spatially extended markets and even spatially proximal markets that did not share the farmer's substantive goals. However, it is not clear how these farmers would respond if their livelihoods were at risk. In summation, it would seem that some farmers begin farming already favoring formal rationality, while those that do not are pressured to do so as the market (as is the case in the above example) or other

responsibilities require them to become more efficient or profitable. There are two important conclusions that can be drawn from these observations.

First, the presence of formally motivated farmers and the demonstrated vulnerability of substantively motivated goals to financial pressures suggest the values that SFSCs are perceived to embody could be transformed as these markets evolve. Thus, efforts to establish SFSC market structures should not be viewed as sufficient efforts to bring about food systems change that addresses problems associated with the CFS.

Second, the importance of spatial and social proximity for farmers committed to pursuing substantive goals, negative substantive perceptions of spatially extended markets, and the demonstrated vulnerability of substantive goals to increasing financial pressure all call into question the ability of AFS and SFSC values to be scaled up—an increasingly common proposal to expand their impact and improve farmer financial outcomes. While the definition of local may be disputable on technical or relative terms, the importance of a social relationship, serving a community with which one is socially engaged, and face-to-face contact to substantively motivated farmers seem immutable. However, it is this very value that seems to be coming under pressure as farmers pursue more efficient means of marketing. How then should SFSCs develop to broaden their impact, increase financial viability, and continue to allow the valuation and validation of substantive goals?

As previously mentioned the role of positive formally and substantively informed motivations seem to be inversely proportional across three SFSC market types. While face-to-face markets lean heavily toward substantive motivations, and spatially

extended markets toward purely formal motivations, spatially proximal markets seem to offer farmers opportunities that meet both formal and substantive goals. Farmers viewed these markets as a way to serve local communities with the added formal benefits of increased efficiency, convenience, lower transactions costs, and high sales volumes. However, the interviews indicated many ways in which these markets could be improved to increase their financial viability.

Many farmers who were interested in increasing their participation in spatially proximal markets saw several common problems with restaurants, schools, and institutions. The first problem is one of irregular and low volumes of sales, which seem to be a consequence of these market venues' ability to easily fulfill their needs through spatially extended markets at little or no cost to their reputation. This may be because the food is transformed by the middle man and the product becomes "theirs." Thus, the value of local sourcing may be diminished and transparency in sourcing may be obscured. However, even in situations where restaurants, institutions, and schools are substantively interested in locally sourced foods, formally informed negative motivations seem to block the expansion of these markets. With respect to producers some of these negative motivations involve high search and negotiation costs, deliveries of relatively small amounts of product, and unique expectations for product quality and processing. Though ostensibly food hubs are intended to mitigate these very costs, the large number of farmers who were grappling with these problems individually and the little mention of food hubs in general in the interviews suggest that there is an opportunity to do more in this regard.

If there is a pattern that can be drawn out from all the interviews in this study it would be that hybridity rather than ideological purity is the norm. All of the farms involved in the study engage in more than one market type. In doing so, they seem to be attempting to take advantage of the parts of the AFS and the CFS that meet their needs. From the AFS they take substantive goals and price premiums. From the CFS they seek low transaction costs and larger sales volumes. Even the large experienced farmers who sell much of their product through spatially extended markets keep some roots in face-to-face-transactions.

While this flexibility is convenient and in fact, as this research has shown, necessary for these farms to be financially viable, it is also worrisome. The promotion of market based solutions such as SFSCs in the pursuit of food systems sustainability seems to be a step in the right direction in that they allow for the valuation of substantive goals which are seen to challenge the values of the CFS. However, because these substantive values are incorporated into the market system they are vulnerable to elimination or worse, fetishization. As Turner and Hope (2015) and Mount (2010) have demonstrated, consumers cannot be trusted to police these markets, and as this study has shown, farmers can be forced to compromise on their substantive goals by exposure to competitive markets. While farmers and even consumers may protest these pressures, as they did when farms first underwent rationalization in the early 20th century, it seems unlikely that they will able to resist these changes. SFSCs as they are currently framed should be understood as temporary and transitional, and their expansion alone is not a long term solution.

Works Cited

Barham, E. (1997). Social movements for sustainable agriculture in France: A polanyian perspective. *Society & Natural Resources*, *10*(3), 239–249. doi:10.1080/08941929709381023

Block, F. (1990). *Postindustrial possibilities*. Los Angeles: University of California Press.

Born, B., & Purcell, M. (2006). Avoiding the local trap: Scale and food systems in planning reserach. *Journal of Planning Education and Research*, *26*, 195–207.

Bues, C. E., & Dunlap, R. E. (1990). Conventional versus alternative agriculture: The paradigmatic roots of the debate. *Rural Sociology*, *55*, 590–616.

Cangiani, M. (2011). Karl Polanyi's institutional theory: Market society and its "disembedded" economy. *Journal of Economic Issues*, *45*(1), 177–198. doi:10.2753/JEI0021-3624450110

Canning, P. (2011). *A revised and expanded food dollar series: A better understanding of our food costs*. Retrieved from http://www.ers.usda.gov/media/131100/err114.pdf

Goldschmidt, W. (1946). *Small Business and the Community: Report of the Smaller War Plants Corporation to the Special Committee to Study Problems of American Small Business*. U.S. Government Printing Office.

Hinrichs, C. C. (2000). Embeddedness and local food systems: notes on two types of direct agricultural market. *Journal of Rural Studies*, *16*, 295–303.

Inwood, S., Clark, J. K., & Bean, M. (2013). The Differing Values of Multigeneration and First-Generation Farmers: Their Influence on the Structure of Agriculture at the Rural-Urban Interface. *Rural Sociology*, *78*(3), 346–370. doi:10.1111/ruso.12012

Kirschenmann, F., Stevenson, S., Buttel, F., Lyson, T., & Duffy, M. (2000). Why worry about the agriculture of the middle. Retrieved from www.agofthemiddle.org

Lyson, T. A. (2004). *Civic agriculture: Reconnecting farm, food, and civil society*. Lebanon, NH: University Press of New England.

Mares, T. M., & Alkon, A. H. (2011). Mapping the food movement: addressing inequality and neoliberalism. *Environment and Society: Advances in Research*, *2*(1), 68–86. doi:10.3167/ares.2011.020105

Marsden, T., Banks, J., & Bristow, G. (2000). Food supply chain approaches: Exploring their role in rural development. *Sociologia Ruralis*, *40*(4).

Martinez, S., Hand, M., Pra, M. Da, Pollack, S., Ralston, K., Smith, T., … Newman, C. (2010). *Local food systems: Concepts, impacts, and issues*. U.S. Department of Agriculture, Economic Research Service.

McClintock, N. (2014). Radical , reformist , and garden-variety neoliberal : coming to terms with urban agriculture ' s contradictions. *Local Evironment*, *19*(2), 147–171.

Mills, C. W., & Ulmer, M. (1946). *Small Business and Civic Welfare: Report of the Smaller War Plants Corporation to the Special Committee to Study Problems of American Small Business*. U.S. Government Printing Office.

Mount, P. (2011). Growing local food: scale and local food systems governance. *Agriculture and Human Values*, *29*(1), 107–121. doi:10.1007/s10460-011-9331-0

Paxson, H. (2012). *The life of cheese: crafting food and value in america*. Oakland: University of California Press.

Renting, H., Marsden, T. K., & Banks, J. (2003). Understanding alternative food networks: Exploring the role of short food supply chains in rural development. *Environment and Planning*, *35*(3), 393–411. doi:10.1068/a3510

Ross, N. J. (2007). How civic is it? Success stories in locally focused agriculture in Maine. *Renewable Agriculture and Food Systems*, *21*(02), 114–123. doi:10.1079/RAF2005134

Salamon, S. (1992). *Prairie Patrimony: Family, Farming, and Community in the Midwest*. Chapel Hill, NC: University of North Carolina Press.

Saldana, J. (2009). *The Coding Manual for Qualitative Researchers*. Thousand Oaks, California: Sage Publications.

Selfa, T., & Qazi, J. (2005). Place, taste, or face-to-face? Understanding producer–consumer networks in "local" food systems in Washington State. *Agriculture and Human Values*, *22*(4), 451–464. doi:10.1007/s10460-005-3401-0

Tilman, D., Cassman, K. G., Matson, P. A., Naylor, R., & Polasky, S. (2002). Agricultural sustainability and intensive production practices. *Nature*, *418*, 671–677.

Turner, B., & Hope, C. (2015). Staging the Local: rethinking scale in farmers' markets. *Australian Geographer*, *46*(2), 147–163. doi:10.1080/00049182.2015.1020602

CHAPTER 5: CONCLUSION

When I began my studies at UVM I wanted to find out what the fundamental difference between the AFS and the CFS was. That paradigmatic lynchpin would answer for me the question of how to move forward with my life. What should I do to help food systems become more sustainable? What I found was that AFSs are not the monolithic social movement I once thought they were. The oppositional framing of the AFS and the CFS as fundamentally differentiated on the basis of opposing economic paradigms that privilege substantive and formal rationality respectively is tenuous at best and subject to change. As these markets become more popular and more competitive, tensions between formal and substantive rationality will continue to escalate. As this research has shown, when these tensions mount, market pressure pushes farmers to privilege formal rationality, which is in part what SFSCs were meant to oppose in the first place. Farmers cannot control the pressures of the market as individuals, and consumers have been shown to misunderstand or perhaps only lightly engage in their potentially more powerful role as SFSC consumers.

Though my research did not explicitly focus on this, a number of farmers, new, beginning, and old mentioned engaging in UVM and NOFA training programs that taught them the keep greater track of both formal and substantive goals. However, what many farmers mentioned as a result of these programs was that farmers learned ways to better track the formal costs of pursuing formal and substantive goals. Several farmers new and experienced then transitioned away from face-to-face markets. This knowledge empowers farmers to better pursue their goals and potentially operate more successful

businesses. However, these efforts by UVM and NOFA are also streamlining SFSC farms to participate within the existing market system and encouraging farmers to respond to formal motivations rather than advocate for fundamental change. Below are a few speculations on how to resolve the tensions between formal and substantive rationality that preserve the importance of substantive rationality.

Influencing the Market

In the context of this Vermont based research, farmers have noted that there are many spatially proximal markets which would potentially allow them to achieve both their formal and substantive goals such as restaurants, schools, and institutions that are currently too formally costly to participate in. This is the low hanging fruit in the system as it is currently construed. There is a market demand for a middleman to take care of search, information, and maintenance costs, logistics, and delivery for these markets. This is a temporary solution, however, because producers will eventually fill this demand and market pressure to prioritize formal rationality will return.

Several farmers noted that they would like to coordinate with other farmers so that they were not competing against each other in the same markets, could get better prices for their products, and continue working on small scale operations. However, these farmers claimed that they were not currently able to do so. If they could, this would reduce market pressure to prioritize formal rationality and allow them to pursue more substantive goals. This stated desire would seem to be the purpose of producer cooperatives. Deep Root Cooperative, which is a major figure in local and regional markets, was often mentioned in interviews, sometimes positively and sometimes

negatively. Though not explicitly examined in this study there seems to be a hierarchy of producers who benefit from participation in this cooperative, and there may be opportunities to create new producer cooperatives in this area which serve smaller farmers and newer farmers.

In addition, many farmers would not even have started farming if they had not received support in the form of grants for farm infrastructure. Many farmers made sure to note that their hoop house was paid for by the National Resources Conservation Service. These subsidized investments in hoop houses potentially increased farm profitability reducing the costs of market participation both through lowering upfront costs and improving profitability. It may be that other investments with these kinds of impacts may exist, but they may be more abstract than investments in infrastructure. Dr. Shoshannah Inwood and her research assistant Emily Stengel have suggested subsidizing childcare as one of these types of investments. This would reduce the upfront costs of childcare and increase on-farm productivity of farmers with young children. As such, this could temporarily reduce market pressure to prioritize formal rationality.

There exist numerous other ways to influence the market price and thus the structure and goals of producers. For example, past federal subsidies for certain commodity crops encouraged overproduction, concentration, and consolidation of farming operations, and the production of a narrow diversity of crops. It seems that federal inputs in this regard have at best ignored small scale and diversified vegetable farms and in some cases threaten to increase costs. For example, several small farmers noted apprehension and uncertainty about the potential impact of the Food Safety and

Modernization Act passed in 2010. These small farmers worried that rules tailored for larger farms might raise their costs of production to untenable levels. Just as national level policy has intentionally and unintentionally guided the evolution of commodity farmers, federal policy could be tailored to substantively motivated SFSC farmers. This is not a new idea. There are efforts to make it easier for public schools subscribing to the national school lunch program to purchase locally. Some amount of federal spending on the Special Supplemental Nutrition Program for Women, Infants, and Children is allowed to be directed to famers markets that support local farmers. Efforts such as these have far from reached their maximum potential.

Influencing Culture

Rather than focus on pulling market levers to change the structure of food production, more lasting and fundamental change could be achieved through shifting the cultural context the market operates in. For people interested in the subject of food systems sustainability, there is abundant information available regarding ways to responsibly engage in the food system as a consumer. This information could be incorporated into public school education, much the way that human caused climate change is finding its way into some public schools' science curriculum. Farm to school programs are already doing this to some degree, familiarizing students with vegetables they may not have encountered, gardening, and entreating students to know your farmer and know your food. However, what seems to be missing from these efforts is an endeavor to instill a sense of responsibility and recognition that food purchasing choices not only impact personal health, but the social, environmental, and economic health of

the community that students live in. For many who have grown up in a culture where consumption is completely alienated from production, these associations are not apparent. Individual purchasing decisions appear atomized, impacting only the end consumer and the entity that took their money. The effect is perhaps an intentional obfuscation of the civic significance of purchasing decisions. This is not merely an entreaty to use public schools to advocate for a particular political position. We live in a consumer capitalist society; creating responsible and empowered consumers that understand their powers and responsibilities in that system is just as important and perhaps more relevant to some people than a civics course. Voting with your fork cannot be the only solution, of course, but any effort that encourages the public discussion of food systems sustainability sews new threads into the fabric of our culture which may slowly evolve into broad cultural change in the future.

Continuing Questions

The above recommendations are meagre; they advocate for incremental change, individual responsibility, and work within the market system. Authentic AFS production and exchange seemed initially to be framed as something that could bring about radical fundamental change in the nature of food production and distribution. While it either became, or always was, a tamer hybrid version of what it claimed to be, the importance of authenticity to the AFS movement remains. What is the role of authenticity to a movement that advocates for change while not being all that different from the kinds of exchange it ostensibly opposes? Is authenticity an ideal that lights the way forward and guides food system and cultural development in a positive direction? Or is it a distraction

that leads some to complacency and leads others to misdirect their efforts to change the food system to merely creating exchange structures that feel authentic while changing little?

One way to examine this problem would be to create a set of metrics that would objectively measure the impacts that farms and distribution systems have on environmental, social, and economic sustainability. Do farms that attempt to adhere to their substantively motivated visions of participating in the local food system and serving their local communities do a better job of achieving desirable sustainability outcomes? If not, we may need to move beyond existing notions of authenticity, and focus on actual rather than perceived outcomes.

COMPREHENSIVE BIBLIOGRAPHY

Barham, E. (1997). Social movements for sustainable agriculture in France: A polanyian perspective. *Society & Natural Resources*, *10*(3), 239–249. doi:10.1080/08941929709381023

Block, F. (1990). *Postindustrial possibilities*. Los Angeles: University of California Press.

Born, B., & Purcell, M. (2006). Avoiding the local trap: Scale and food systems in planning reserach. *Journal of Planning Education and Research*, *26*, 195–207.

Boucher, D., Elias, P., Lininger, K., May-Tobin, C., Sarah, R., & Saxon, E. (2011). *The Root of the Problem: What is driving tropical deforestation today?* Cambridge, MA: Union of Concerned Scientists.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77–101.

Bues, C. E., & Dunlap, R. E. (1990). Conventional versus alternative agriculture: The paradigmatic roots of the debate. *Rural Sociology*, *55*, 590–616.

Cangiani, M. (2011). Karl Polanyi's institutional theory: Market society and its "disembedded" economy. *Journal of Economic Issues*, *45*(1), 177–198. doi:10.2753/JEI0021-3624450110

Canning, P. (2011). *A revised and expanded food dollar series: A better understanding of our food costs*. Retrieved from http://www.ers.usda.gov/media/131100/err114.pdf

Conner, D. S., & Levine, R. (2006). Circles of association: The connections of community-based food systems. *Journal of Hunger & Environmental Nutrition*, *1*(3), 5–26. doi:10.1300/J477v01n03

Evans, A. E., Jennings, R., Smiley, A. W., Medina, J. L., Sharma, S. V., Rutledge, R., … Hoelscher, D. M. (2012). Introduction of farm stands in low-income communities increases fruit and vegetable among community residents. *Health & Place*, *18*(5), 1137–43. doi:10.1016/j.healthplace.2012.04.007

Gale, F. (1992). Direct farm marketing as a rural development tool. *Rural Development Perpectives*, *12*(2), 19–25.

Gillespie, G. W., & Johnson, S. E. (2010). Success in farm start-ups in the northeastern United States. *Journal of Agriculture, Food Systems, and Community Development, 1*(1), 31–48.

Goldschmidt, W. (1946). *Small Business and the Community: Report of the Smaller War Plants Corporation to the Special Committee to Study Problems of American Small Business*. U.S. Government Printing Office.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *The American Journal of Sociology, 91*(3), 481–510.

Herren, H. R. (2011). *Agriculture: Investing in Natural Capital*. United Nations Environmental Programme. Retrieved from http://www.unep.org/greeneconomy/Portals/88/documents/ger/2.0_Agriculture.pdf

Hinrichs, C. C. (2000). Embeddedness and local food systems: notes on two types of direct agricultural market. *Journal of Rural Studies, 16*, 295–303.

Hoppe, R. A., MacDonald, J. M., & Korb, P. (2010). *Small Farms in the United States: Persistence Under Pressure*. U.S. Department of Agriculture, Economic Research Service.

Inwood, S., Clark, J. K., & Bean, M. (2013). The Differing Values of Multigeneration and First-Generation Farmers: Their Influence on the Structure of Agriculture at the Rural-Urban Interface. *Rural Sociology, 78*(3), 346–370. doi:10.1111/ruso.12012

Kirschenmann, F., Stevenson, S., Buttel, F., Lyson, T., & Duffy, M. (2000). Why worry about the agriculture of the middle. Retrieved from www.agofthemiddle.org

Kloppenburg, J., Lezberg, S., Master, K. De, Stevenson, G. W., Hendrickson, J., Mead, M., & Mintz, S. (2000). Tasting food, tasting sustainability: Defining the attributes of an alternative food system with competent, ordinary people. *Human Organization, 59*(2), 177–186.

Lehnert, T., Sonntag, D., Konnopka, A., Riedel-Heller, S., & König, H.-H. (2013). Economic costs of overweight and obesity. *Best Practice & Research Clinical Endocrinology & Metabolism, 27*(2), 105–15. doi:10.1016/j.beem.2013.01.002

Levins, R. A., & Cochrane, W. W. (1996). The treadmill revisited. *Land Economics, 72*(4), 550–553.

Lyson, T. A. (2004). *Civic agriculture: Reconnecting farm, food, and civil society*. Lebanon, NH: University Press of New England.

Lyson, T. A., Torres, R. J., & Welsh, R. (2001). Scale of agricultural production, civic engagement, and community welfare. *Social Forces*, *80*(1), 311–327.

Magdoff, F., & van Es, H. (2000). *Building better soils for better crops* (2nd ed.). Burlington, VT: Sustainable Agriculture Network.

Mares, T. M., & Alkon, A. H. (2011). Mapping the food movement: addressing inequality and neoliberalism. *Environment and Society: Advances in Research*, *2*(1), 68–86. doi:10.3167/ares.2011.020105

Marsden, T., Banks, J., & Bristow, G. (2000). Food supply chain approaches: Exploring their role in rural development. *Sociologia Ruralis*, *40*(4).

Martinez, S., Hand, M., Pra, M. Da, Pollack, S., Ralston, K., Smith, T., … Newman, C. (2010). *Local food systems: Concepts, impacts, and issues*. U.S. Department of Agriculture, Economic Research Service.

McClintock, N. (2014). Radical , reformist , and garden-variety neoliberal : coming to terms with urban agriculture ' s contradictions. *Local Evironment*, *19*(2), 147–171.

Mills, C. W., & Ulmer, M. (1946). *Small Business and Civic Welfare: Report of the Smaller War Plants Corporation to the Special Committee to Study Problems of American Small Business*. U.S. Government Printing Office.

Mount, P. (2011). Growing local food: scale and local food systems governance. *Agriculture and Human Values*, *29*(1), 107–121. doi:10.1007/s10460-011-9331-0

National Agricultural Statistics Service. (2014). *2012 Census of Agriculture: preliminary report - U.S. and state data*. United States Department of Agriculture. Retrieved from http://www.agcensus.usda.gov/Publications/2012/

National Commission on Small Farms. (1998). *A time to act: A report of the USDA national commission on small farms*. U.S. Department of Agriculture.

Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2014). Prevalence of childhood and adult obesity in the United States, 2011-2012. *JAMA: Journal of the American Medical Association*, *311*(8), 806–14. doi:10.1001/jama.2014.732

Paxson, H. (2012). *The life of cheese: crafting food and value in america*. Oakland: University of California Press.

Renting, H., Marsden, T. K., & Banks, J. (2003). Understanding alternative food networks: Exploring the role of short food supply chains in rural development. *Environment and Planning*, *35*(3), 393–411. doi:10.1068/a3510

Ross, N. J. (2007). How civic is it? Success stories in locally focused agriculture in Maine. *Renewable Agriculture and Food Systems*, *21*(02), 114–123. doi:10.1079/RAF2005134

Rosset, P. (1999). *The multiple functions and benefits of small farm agriculture*. Oakland: Food First/The Institute for Food and Development Policy.

Salamon, S. (1992). *Prairie Patrimony: Family, Farming, and Community in the Midwest*. Chapel Hill, NC: University of North Carolina Press.

Saldana, J. (2013). *The Coding Manual for Qualitative Researchers*. Thousand Oaks, California: Sage Publications.

Selfa, T., & Qazi, J. (2005). Place, taste, or face-to-face? Understanding producer–consumer networks in "local" food systems in Washington State. *Agriculture and Human Values*, *22*(4), 451–464. doi:10.1007/s10460-005-3401-0

Shute, L. L. (2011). *Building a better future with farmers: Challenges faced by young, american farmers and a national strategy to help them succeed*. National Young Farmer's Coalition.

Stevenson, G. W., Kate, C., Robert, K., Larry, L., Marcia, O., & Stewart, S. (2011). Midscale food value chains: An introduction. *Journal of Agriculture, Food Systems, and Community Development*, *1*(4), 27–34.

Tilman, D., Cassman, K. G., Matson, P. A., Naylor, R., & Polasky, S. (2002). Agricultural sustainability and intensive production practices. *Nature*, *418*, 671–677.

Turner, B., & Hope, C. (2015). Staging the Local: rethinking scale in farmers' markets. *Australian Geographer*, *46*(2), 147–163. doi:10.1080/00049182.2015.1020602

University of Leeds. (2014). Possible Causes of Polinator Declines. Retrieved August 12, 2014, from http://www.agriland.leeds.ac.uk/about/causes.php

Vermont Sustainable Jobs Fund. (2013). *Farm to plate strategic plan*. doi:10.1093/annonc/mdu083

Wallinga, D. (2010). Agricultural policy and childhood obesity: a food systems and public health commentary. *Health Affairs*, *29*(3), 405–410. doi:10.1377/hlthaff.2010.0102

Wilson, C., & Tisdell, C. (2001). Why farmers continue to use pesticides despite environmental, health and sustainability costs. *Ecological Economics*, *39*(3), 449–462. doi:10.1016/S0921-8009(01)00238-5

Zerbe, N. (2010). Moving from bread and water to milk and honey: Framing the emergent alternative food systems. *Humboldt Journal of Social Relations*, *33*(1/2).

Appendix A: Interview Guide

Note. As interviewer skills and focus improved the interviewer began to focus questioning on sections I, II, III, and V.

I. Please tell me about your farm, and how you chose farming.

a. What do you do here?
b. What motivated you to start a farm?
c. What motivates you to continue farming?
d. What are your goals with respect to your farm?
    i. Are you meeting those goals?
        1. If not, what needs to change in order for those goals to be met?
e. What are your goals with respect to your lifestyle?
    i. Are you meeting those goals
        1. If not, what needs to change in order for those goals to be met?
f. For you, what does it mean for a farm to be successful?
    i. Has than definition changed since you started farming?
        a. Do you feel that your farm is successful at present?
            1. If yes
                a. For what reasons do you think your farm is successful?
            2. If no or in between
                a. What needs to happen for your farm to be successful?
                b. How optimistic are you that that can happen?
g. Where do you see your farm in 5 to 10 years? What, if anything, needs to change in order to make that happen?

h. What are the biggest challenges you face with your farm at present? What some of the biggest challenges you have faced in the past, or when you started

II. Now I want to ask you a few questions about the characteristics of your farm.

a. Can you tell me what you do here on your farm?
    i. Enterprises
        1. Acreage/importance of each
        2. Non-Agricultural enterprises
    ii. How did you choose to become engaged in these enterprises?
b. Have you made any significant changes to your production process since you started farming? How did you know it was time to make those changes?
    i. Certifications, mechanization, infrastructure

c. Do you plan to make any changes to your production practices in the future? What is motivating these decisions?
d. Have you made any significant purchases since you started farming? How did you know it was time to invest in that?
e. How do you decide what to grow/raise and how much you grow/raise?
f. Do you own, or lease the land?
    i. *If you own*: How did you come to own it?
    ii. *If you lease*: Is it a long term or a short term lease? How did you find the land?
g. Do you have any wage, or salaried employees? If so, how many?
h. Do friends or family ever provide labor, financial, childcare, or logistical support?
    i. How important is this support to your operation?
i. What are some of the challenges and benefits of the way you run your farm?

III. Now I would like to ask you a few questions about your market avenues and marketing strategies.

a. How do you sell your products? (Diversity of Market Venues)
    i. For what reasons do you participate in each of these market venues?
    ii. What challenges and benefits do you see from selling your products in each of these ways?
    iii. Has the way you sold your products changed since you started farming? If so, why?
    iv. Do you plan, or hope to change the way you sell your products in the future? If so, why?
b. What do you think differentiates your product? What makes it special? (values, goals)
    i. How do you communicate the special value of your products to customers?
c. Could you tell me how you advertise or market your product or farm? What is important for the customers to know?

IV. Now I would like to ask you a few questions about decision making strategies.

a. Do you collect and record any kind of information regarding your farming operation?
    i. What kinds of data to you collect?
        a. How is it collected and recorded?
        b. Who collects it?
        c. How often do you collect it?
        d. When do you have time to analyze it?
        e. How does the data inform your operation?

1. How important is this data to how you manage your operation? (level of comfort with numbers)

ii. When you have a question you do not know the answer to, what do you do?

iii. Have there been portions of your initial business that you eliminated or have begun to concentrate on?

a. What motivated you to make those changes?

b. How did you decide it was time to make those changes?

V. Demographic Questions

a. What was your farm's total gross income in 2013?

b. What was your net farm income in 2013

c. Is your farm your main source of income?

i. If you work another job, why?

d. Highest level of education

e. When did you start this farm, and how old were you when you started?

f. Did you have any prior experience farming? If so, what kind, and for how long?

g. Did you ever attend any workshops or training programs?

VI. As a farmer, your experiences and insights are very valuable to beginning farmers. I would like to ask you a few questions regarding advice you might give to beginning farmers.

a. What qualities do you think are important for a farmer to have?

b. What would you tell a beginning farmer were the biggest challenges and benefits of operating a farm?

c. What advice would you give to a beginning farmer who was considering borrowing money to start or support a farm?

i. Did you borrow money, from whom? For what?

ii. Do you currently carry any debt?

d. What advice would you give to a beginning farmer who is considering supporting her farm with an off-farm job?

e. What advice would you give a beginning farmer who was considering purchasing crop insurance?

VII. Do you have any questions for me before we conclude the interview?